

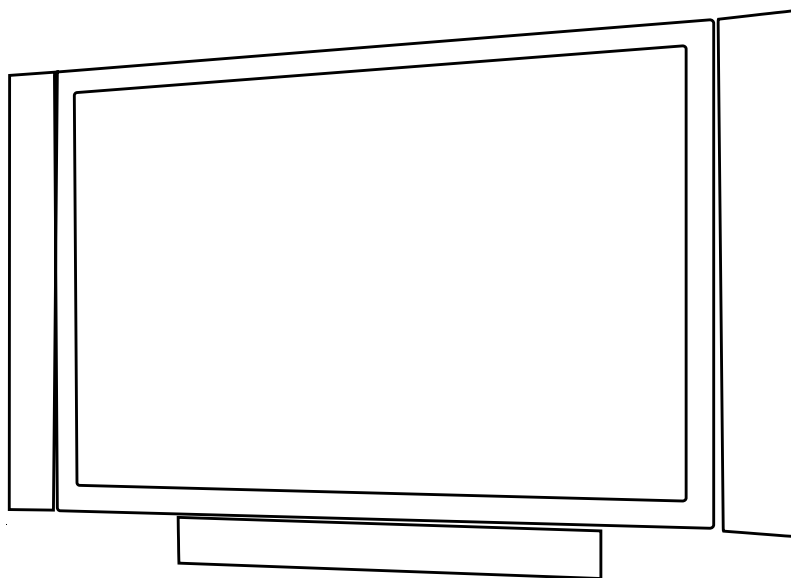
S/M NO. : DSP220PEF0

# Service Manual

## 42" PLASMA PDP TV

**CHASSIS : SP-220P**

**Model : DPP-42A1LASB**



**Caution**

: In this Manual, some parts can be changed for improving. their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List)in Service Information Center.

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## II. Parts of MODULE

1. Confirmation Manual
2. Repair Manual

# I. Parts with the exception of MODULE

## 1. Safety Precautions

### 1. Safety Precautions

- (1) When moving or laying down a PDP Set, at least two people must work together. Avoid any impact towards the PDP Set.
- (2) Do not leave a broken PDP Set on for a long time. To prevent any further damages, after checking the condition of the broken Set, make sure to turn the power (AC) off.
- (3) When opening the BACK COVER, you must turn off power (AC) to prevent any electric shock. When PDP is operating, high voltage and high current inside the Set can cause electric shocks.
- (4) When loosening screws, check the position and type of the screw. Sort out the screws and store them separately for reassembling. Because screws holding PCBs are working as electric circuit GROUNDING, make sure to check if any screw is missing when assembling/reassembling. Do not leave any screws inside the set.
- (5) If you open the BACK COVER, you will see a Panel Gas Exhaust Tube (Picture. 1-1) inside the bracket. If this part is damaged, the entire PDP PANEL must be replaced. Therefore, when working with the set, be careful not to damage this part.



Picture 1-1. Panel Gas Exhaust Tube

- (6) A PDP Set contains different kinds of

connector cables. When connecting or disconnecting cables, check the direction and position of the cable beforehand.

- (7) Connect/disconnect the connectors slowly with care especially FFC (film) cables and FPC cables. Do not connect or disconnect connectors instantaneously with force, and handle them carefully for reassembling.
- (8) Connectors are designed so that if the number of pins or the direction does not match, connectors will not fit. When having problem in plugging the connectors, check their kind, position, and direction.

## 2. Product Specification

### 2-1. SPECIFICATION

ITEM	SPECIFICATION	REMARK
1. GENERAL		
1-1. MODEL NO	DPP-42A1LASB	
1-2. CHASSIS NO	SP-220P	
1-3. SCREEN SIZE	42" (16:9)	
1-4. COUNTRY	Europe	
1-5. RESOLUTION	852(H) x 480(V)	
1-6. REMOCON TYPE	R-53J17	
1-7. SAFETY STANDARD	CE(CLASS B), CB	
1-8. TUNING METHOD	VS	
1-9. MEMORY CHANNEL	99CH	
2. MECHANICAL		
2-1. APPEARANCE		
1) WITHOUT STAND	W x H x D =1260 x 653 x 91 mm	
2) WITH STAND	W x H x D =1260 x 748.5 x 300 mm	
2-2. WEIGHT		
1) WITHOUT STAND	33 Kg	
2) WITH STAND	38.75 Kg	
3. ELECTRICAL		
3-1. VIDEO INPUT	COMPOSITE(NTSC, PAL, SECAM, PAL-M/N, NTSC4.43) & S-VHS(50/60Hz Y/C) 1 Port	
3-2. DTV/DVD INPUT	1080i, 720P, 480P, 480i, 576P, 576i (Y, Pb/Cb, Pr/Cr COMPONENT SIGNAL) 2 Ports	
3-3. SCART INPUT	SCART(COMPOSITE, R,G,B, SOUND R/L) 2 Ports	
3-4. PC INPUT	VGA ~ SXGA(Dot clock : 110MHz), 15 PIN D-SUB 1 Port	
3-5. DVI INPUT	DVI-D INPUT (DVI Jack) 1 Port	
3-6. TV INPUT		
1) COLOR STANDARD	PAL B/G+I/I+D/K, L-SECAM, L'-SECAM	
2) ANTENNA IN	ONE INPUT 75 $\Omega$ Unbalanced (DIN Standard)	
3) RECEPTION CHANNEL		
	VHF LOW : E2 ~ S6 Ch. VHF HIGH : S7 ~ S36 Ch. UHF : S37 ~ E69 Ch. L'-SECOM : FB, FC1, FC PIF : 38.90MHz (PAL, L-SECAM) 33.9 MHz (L'-SECAM) SIF : 33.40MHz (B/G), 32.90MHz (I/I), 32.4MHz (D/K, L-SECAM), 40.4MHz (L'-SECAM)	
4) IF & SUBCARRIER		
3-7. SOUND INPUT	VIDEO 1 Port, DTV/DVD 2 Ports, PC 1 Port, DVI 1 Port	
3-8. SPEAKER OUTPUT	10W(R) + 10W(L)	
3-9. POWER REQUIREMENT	AC 100V~240V, 50/60Hz	



## Product Specification

ITEM	SPECIFICATION	REMARK
3-10. POWER CONSUMPTION 3-11. RS-232 CONTROL 3-12. AV OUTPUT 3-13. FUNCTION 1) SCALING  2) OSD  3) PIP / POP  4) OTHERS	270W RS-232 Communication (EXTERNAL UPGRADE) SCART(CVBS, SOUND R/L) 2 Ports  DVI : Screen Mode (16:9, 4:3, Panorama) PC : Screen Mode (16:9, 4:3, Panorama), H/V Position, Auto TV / VIDEO / DVD (480, 576 i/p) : Screen Mode (16:9, 4:3, Panorama, LB (16:9), LBS (16:9), 14:9, LB (14:9), LBS (14:9) Auto) 18 Languages (English, Greek, Dutch, German, Russian, Rumanian, Swedish, Danish, Finnish, Norwegian, Spanish, Italian, Franch, Polish, Portuguese, Czech, Hungarian, Slovakian) TV, Video, S-Video / TV, Video, S-Video Still, Sleep Mode, Sound Mode, Timer, Screen Mode, Teletext (Level 1.5), WSS	
4. OPTICAL 4-1. SCREEN SIZE 4-2. ASPECT RATIO 4-3. NUMBER OF PIXELS 4-4. DISPLAY COLOR 4-5. CELL PITCH 4-6. PEAK LUMINANCE 4-7. CONTRAST RATIO 4-8. VIEWING ANGLE	42”(106 cm) DIAGONAL 16 : 9 852(H)X480(V) 1,073,000,000 Colors ( 10bits for each RGB) 1.08(H) x 1.08(V)mm (1 Pixel = a Set of RGB Cells ) 1500cd/m <sup>2</sup> (WITH FILTER GLASS) 10000:1 (Dark Room) 160 degree(VERTICAL/HORIZONTAL)	
5. USERCONTROL & ACCESSORIES 5-1 CONTROL BUTTON(SET)  5-2. REMOTE CONTROL (R-52M17)  5-3. ACCESSORIES 5-4. OPTIONAL PARTS	PUSH-PULL S/W : AC POWER BUTTON SOFT S/W: MOVE/CH(UP, DOWN), VOLUME(LEFT, RIGHT), MENU, INPUT SELECT  Power, Universal Selection (TV, VIDEO/DVD, CATV/SAT), 10 KEYS(0~10), Recall, VCR /DVD KEY (F.R/SLOW, Play, F.F/SLOW, Stop, PAUSE, OPEN/CLOSE, PREV, NEXT ), MENU, TV, AV, Component, PC/DVI, STILL, PREV PR, MUTE, PR (UP/DOWN), VOL(UP/DOWN), SCREEN MODE / MIX, Screen Size, Sleep Timer, I-II / CYAN, Sound Mode / Index, Red, Green, Yellow, TXT, Reveal, Update, Expand, Subpage, Hold, PIP, SWAP, PR+, PR-, Position, Source REMOTE CONTROL, INSTRUCTION MANUAL, POWER CORD STAND, WALL HANGER	

## 2-2 Available Input Signal

### (1) PC & DVI

Resolution	H Freq. (KHz)	V Freq. (Hz)	Remark	DVI	PC
640 X 480	31.469	59.940	DOS	O	O
	37.861	72.809	VESA	O	O
	37.500	75.000	VESA	O	O
720 X 400	31.469	70.087	IBM	O	O
800 X 600	35.156	56.250	VESA	O	O
	37.879	60.317	VESA	O	O
1024 X 768	48.363	60.004	VESA	O	O

### (2) Component

- 1080i – 50 / 60Hz
- 720p – 50 / 60Hz
- 576p - 50 / 60Hz
- 480p - 50 / 60Hz

### (3) Video

- PAL, PAL – M, PAL – N
- NTSC, NTSC 4.43
- SECAM

## Product Specification

### 2-3. Remote Control Setup Code

#### VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
ADELSOUND	078
ADIBA	029
ADYSON	029
AGASHI	155
AIOSTAY	148
AIWA	033 039 044 055 073 090 112 116 148 152 166
AKAI	028 033 044 053 056 061 090 092 103 112 113 124 133 155
	192
AKIBA	029
AKURA	029 112 090
ALBA	021 028 029 033 039 059 061 064 072 073 114 119 120 124
	136 166 171
ALBIRAL	155
ALLORGAN	056
ALLSTAR	065
AMBASSADOR	061 171
AMSTRAD	021 029 039 107 119 148 180 181
ANGLO	148
ANITECH	029 155
ANITSCH	030
ANSONIC	078
APHEL SOUND	148
ARC EN CIEL	044 090
ARISTONA	049 065
ASA	054 055 065 148 175
ASBERG	155
ASTRA	148
ASTRO SOUND	155
ASUKA	029 036 039 055 065
ATLANTIC	155
AUDIOSONIC	021
AUDIOTON	061
AWA	021 053 055 056 155
AWATRON	148
BAIRD	015 021 039 044 064 090 103 104 112 130
BANG & OLUFSEN	044 155
BASIC LINE	021 029 061 064 073 171
BAUR	051 054 155 158
BESTAR	021 061
BLACK PANTHER	021
BLAUPUNKT	065 107 137 147 163 164 174 179 183
BLOKSONIC	002
BLUE SKY	029 033 055 166
BONDSTEC	029 061
BOSCH	163
BRANDT	016 023 090 165
BRANDT ELECTRONIC	112
BRANDT ELECTRONIQUE	044 090
BRAUN	147
BRINKMANN	166
BRION VEGA	160
BUSH	021 028 029 033 039 061 064 072 073 119 120 136 166
C. EDISON	160

## Product Specification

### VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
CANON	147
CAPEHART	061
CARENA	065
CARREFOUR	009
CASIO	039 148
CATHAY	021
CATRON	061 171
CGE	039 044 090 133 148 155
CIHAN CLARIVOX	155
CIMLINE	029
CLATRONIC	029 061 171
COMBITECH	033
CONDOR	021 061 155 171
CONTINENTAL EDISON	044 090
CORVUS	148
CRAIG	008 056
CROSLEY	160
CROWN	009 021 029 061 064 171
CROWN/ONWA	148
CURTISMATHES	060
CYRUS	175
DAEWOO	001 009 021 033 061 064 155 171
DANSAI	021 029 055
DAWA	155
DAYTRON	021 061
DE GRAAF	113 177
DECCA	039 044 047 065 090 148 155 166 175
DECCA(UK)	054
DEGRAAF	015 039 049 054 065 113 148
DEITRON	021
DENKO	029
DENON	113
DESMET	155
DIAMANT	055
DIXI	078
DOMOH	155
DORIC	160
DUAL	021 039 044 065 090 112 148 155
DUMONT	015 039 054 065 148 155 175 189
DYNATECH	039 148
ELBE	021 036 148
ELCATECH	029
ELIN	056 113 155
ELSAY	029
ELTA	021 029 148
EMERSON	009 011 029 032 039 060 073 127 148 155
ESC	021 056 057 061 064
ESSELTE	148
ETZUKO	029
EUROMAN	155
EUROPHON	061
FENNER	061 155
FERGUSON	016 021 023 039 044 090 094 100 104 108 112 130 131 165
FIDELITY	029 039 056 148 162
FINLANDIA	015 039 049 054 065 113 175

## Product Specification

### VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
FINLUX	015 019 039 044 049 053 054 065 103 107 113 143 146 147 148 159 175 189
FIRST LINE	009 021 029 053 055 072 073 113 148 155 166
FISHER	008 015 019 032 034 036 061 160
FORMENTI	155 159
FORMENTI-P HOENIX	054
FRONTECH	061 171
FUJITSU	039 148
FUNAI	039 148
GALAXY	039
GBC	029 061 155 159
GBC(UK)	054
GE	060
GEC	065 160 175
GELOSO	029 159
GENERAL	061 148 171
GENERAL TECHNIC	166
GENEXXA	015
GOLDHAND	029
GOLDMEDAL	148
GOLDSTAR(LG)	021 036 039 055 148 155 178
GOODMANS	021 029 039 050 054 055 056 061 064 065 072 073 148 155 166 171 183
GRAETZ	015 019 044 056 057 090 112
GRAETZ(ITT)	160
GRANADA	015 019 039 049 055 056 065 113 147 155 160 162 175 192
GRANADA(UK)	054 107 113
GRANDIN	021 029 039 055 061 160
GRONIC	155
GRUNDIG	029 054 065 072 107 143 164 165 166 175 183 190 191
HANIMEX	033
HANSEATIC	021 054 055 065 155 160
HANTOR	061
HARMAN/KARDON	036
HARWOOD	029
HCM	029 072
HIFIVOX	044 090
HINARI	011 021 029 030 033 057 072 073 078 090 112 127
HISAWA	033
HITACHI	015 039 044 056 057 065 078 090 112 113 160 177 189 192
HORNYPHONE	065
HYPER	155
HYPSON	021 029 033 155
IMPEGO	061
IMPERIAL	039 056 096 148 155
INGELEN	019 044 090
INGERSOL	056 078
INNO HIT	021 029 054 056 061 160
INTERBUY	029 055
INTERFUNK	015 054 065 155 160 175
INTERFVIDEO	148
INTERNAL	021
INTERNATIONAL	021
INTERVISION	021 039 055 148 155 166
IRRADIO	029 055 065

## Product Specification

### VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
ITT	015 019 044 056 057 090 103 112 133
ITT NOKIA	015 019 044 049 056 090 103 113 133 155 160 162
ITV	021 055 061 064 171
JENSEN	044
JVC	044 047 090 112 115 133 170
KAISUI	029
KAMBROOK	148
KANSAI	148
KAPSCH	160
KARCHER	021 054 056 155
KENDO	028 029 055 073 103 166
KENWOOD	019 036 044 047 090 112
KIMARI	008
KNEISSEL	033 055 166
KOENIG	159
KOERTING	155
KOLSTER	155
KORPEL	029
KRIESLER	049
KUBA	008 147 148
KYOTO	029
LENCO	064
LENOIR	155
LEYCO	029 155
LIPETEC	166
LLOYD	039 148
LOEWE	055 065 078 137 175
LOEWE OPTA	054 155
LOGIK	029 056 057 073 078 103
LUMA	032
LUMATRON	021
LUXON	148
LUXOR	008 015 019 029 049 050 053 103 113 160
LXI	055
MAGNADFON	160
MAGNADYNE	054 155 159 160
MAGNASONIC	019
MAGNAVOX	060 065
MANESTH	009 029 065 148
MARANTZ	036 050 054 059 065 073 175 176
MARK	021 061
MATSUI	011 032 033 039 055 056 059 073 078 114 127 136 160 166
MATSUSHITA	187
MAXWELL	155
MEDIATOR	065
MEDION	033 166
M ELECTRONIC	036 039 055 148 155
MEMOREX	008 015 019 039 049 055 148
MEMPHIS	029
METZ	055 065 137 164 179 191
MGA	053
MICORMAY	166
MIGROS	039
MINERVA	164

## Product Specification

### VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
MINOLTA	113
MITSUBISHI	047 053 054 065 154 155 175
MONEXE	148
MTC	039 056 148
MULTITECH	015 021 029 039 054 061 064 148 155
MURPHY	039 148 160
MYRYAD	175
N.E.I	054
NAD	015
NAKAMURA	148
NAONIS	044 090
NATIONAL	107 137
NEC	015 036 044 047 055 090 112
NECKERMANN	011 019 044 051 054 056 065 090 127 133 155 158 160 175
NEI	155
NESCO	029 033 039 148
NEWTECH	155
NIKKAI	021 029 061
NOKIA	015 019 021 028 044 049 056 057 065 090 103 112 113 133
NORDMENDE	014 016 020 023 039 044 047 090 102 112 133 142 159 161
	165 185
OCEANIC	015 039 049 065 090 112
OCEANIC(ITT)	160
OCEANUIC	113
OKANO	021 028 029 124 166
OLYMPUS	107 147
OMAGA	148
OPTIMUS	187
OPTONICA	049 050
ORAVA/OTF	155
ORION	011 032 033 059 073 078 119 120 127 148 155 166
ORSON	039
OSAKI	029 039 055 148 155
OSUME	072
OTAKE	119 120
OTTO VERSAND	051 054 065 147 155 158 159 175
PALLADIUM	028 029 055 056 078 090 112 148 160
PALSONIC	029 039
PANAMA	155
PANASONIC	107 137 147 148 160 179 187
PATHE CINEMA	053 078 127
PATHE MARCONI	044 090 112
PCM	155
PENTAX	113 189
PERDIO	039 148
PHILCO	029 036 148 155 160
PHILIPS	044 049 050 054 065 079 145 146 155 175 176 183 184
PHONOLA	049 054 065 175
PIONEER	047 054 065 113 145 175
PLANTRON	160
PORTLAND	021 061 171
PRINZ	039
PROFEX	030
PROFITRONIC	056 057 065
PROLINE	039 072 148 165

## Product Specification

### VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
PROSCO	021 148
PROSONIC	021 039
PROTECH	065
PROVISION	021
PYE	049 054 065 175
QUALREFT	056 148
QUARTZ	019
QUASAR	187
QUELLE	011 044 054 055 056 065 107 127 175
RADIALVA	029 049 055 065
RADIOLA	049 065 175
RADIONETTE	160
RANK	090
RCA	060
REALISTIC	008 015 019 039 049 050 056 147 148
RECOR	155
REDIFFUSION	160
REOC	166
REX	044 090 112
RFT	029 061 183
ROADSTAR	021 029 055 056 057 064 148
ROYAL	029
SABA	009 014 016 021 023 044 047 090 102 112 115 133 142 165
	185
SAISHO	011 032 073 078 090 114 127 136 148 166
SALORA	015 019 053 103 162
SAMBERS	148
SAMSUNG	009 054 056 057 060 067 092 096 155
SAMURAI	061
SANSUI	029 044 047 090 112 166
SANWA	078
SANYO	008 015 019 047 049 073 113 151 160
SAVILLE	021 033 056
SBR	054 065 079 175 176
SCAN SONIC	056
SCHAUB LORENZ	015 019 028 039 044 090 112 160
SCHNEIDER	021 029 039 049 054 055 056 065 096 148 155 160 175
SEAWAY	021
SEG	021 029 030 056 057 096 148
SEI	175 078
SEI-S INUDYNE	065 078
SELECO	044 055 061 090 107 112 115 155
SEMIVOX	009
SENTRA	029 061 072 113 171
SETRON	029
SHARP	049 050 055 127 148
SHINKO	148
SHINTOM	015 029 148
SHIVAKI	055
SHORAI	078
SIAREM	159 160
SIEMENS	015 019 034 055 065 164 175 176
SIERA	049 065
SILVA	055
SILVER	021



## Product Specification

### VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
SIMKO	148
SINGER	009 155
SINUDYNE	054 065 078 146 155 160 175
SOLAVOX	061 113 160 162 171
SONAMIC	148
SONITRON	008
SONNECLAIR	029
SONOKO	021 064 155
SONOLOR	019 049 050
SONTEC	055 155
SONY	039 051 158 172 173 174 186
SOUNDWAVE	055
SSANGYONG	029
STANDARD	021
STARLITE	015 055
STERN	021 044 090
STRONG	148
STS	113
STZ	148
SUNKAI	021 073 166
SUNSTAR	039 148
SUNTRONIC	039
SUNWOOD	029
SUPERTEC	148 155
SUPRA	055 056 148 155
SYLVANIA	039 053 148
SYMPHONIC	029 039 053 148
TAISHO	078
TANDBERG	021 032 127
TANDY	039 015
TASHIKO	039 049 055 056 065 148
TATUNG	033 039 044 049 053 065 090 112 148 166 175
TEAC	021 039 044 055 064 065 090 116 148 183
TEAK	155
TEC	021 029 061 148 155 171
TECHNICS	107 137 147
TECHNISAT	166
TEINEL	155
TEKNIKA	039 148
TELEAVIA	016 044 090 112
TELEFUNKEN	014 016 021 023 044 090 112 133 165 185
TELERENT	147 148
TELETECH	021 029 039
TELEVIDEON	155 159 160
TEMPEST	056 061
TENOSAL	029
TENSAI	029 030 039 055 078 148 155
TETUNG	054
TEVION	166
THOMSON	014 016 020 023 044 047 090 112 133 165 185
THORN	015 044 055 090 112 127
THORN-F ERGUSON	023 044 051 090 094 100 104 108 113 130 131 133 155 158
	160 162
TIVO HDD	012
TMK	127

## Product Specification

### DVD

Maker (Brand) Name	Code Number (3 digit) List
3DLAB	372
AFREEY	386
AIWA	375
AKAI	312
ALBA	387 400
AMSTRAD	385
APEX DIGITAL	361
A-T REND	386
BLUE SKY	380
BUSH	379 382 385
CALIFORNIA AUDIO	340
CINEULTRA	382
CLASSIC	327
CYBERHOME	386
DAEWOO	383 402
DANSAI	402
DECCA	402
DENON	302 322 330 344 351
DENVER	382
DENZEL	377
DIAMOND	376
DIVIDO	383
DMTECH	310
DUAL	376 377
ELTA	379
ENZER	377
FISHER	313
GE	303 304
GOLDSTAR(LG)	305 339 355 370 401
GO-V IDIO	311
GREENHILL	400
GRUNDIG	372 380 383
HANSEATIC	339
HARMAN KARDON	366 554 332
HITACHI	354 377
JATON	377
JMB	380
JVC	306
KENWOOD	307 344 343 350 369 390
KISS	377
KLH	368
LAWSON	383
LECSON	381
LENCO	382
LIFETEC	376
LOGIX	383
LOTTE	308
MAGNAVOX	309 333 356
MANHATTAN	383
MARANTZ	333 359 372
MATSUI	376 380
MBO	331

## Product Specification

### DVD

Maker (Brand) Name	Code Number (3 digit) List
MEDION	376 383
MICROMEDIA	309
MICROMEGA	372
MINOWA	383
mitsubishi	323 336
MONYKA	377
NAD	302 362
NAKAMICHI	334
NEUFUNK	377
ONKYO	309 315 348 393
OPTIMUS	341 350
ORION	380
ORITRON	376 396
PANASONIC	324 325 330 335 344 352
PHILCO	379
PHILIPS	309 333 356 372 395
PHONOTREND	382
PIONEER	302 320 341 346 365
PROCEED	360
PROLINE	376
PROSCAN	303 304 337
PROVISION	382
RAITE	377
RCA	303 304 318 337
REC	344 397
REVOY	382
ROADSTAR	379 382 397
ROTEL	306
RUNCO	326
SALORA	339
SAMSUNG	353 354
SANSUI	380
SANYO	349
SCAN	383
SCHNEIDER	376
SEG	377 385
SHARP	321 328 350
SHERWOOD	329
SHINCO	387
SKYMASTER	327
SM ELECTRONIC	379
SONY	314 315 343 345 367 389
STANDARD	376
TATUNG	402
TEAC	387 341 400
TECHNICS	326 344
TENSAI	376 379
TEVION	376
THOMPSON	303 304
THOMSON	373 388 391
TOKAI	377
TOKIWA	383
TOSHIBA	302 309 333 357 358

## Product Specification

### DVD

Maker (Brand) Name	Code Number (3 digit) List
UMAX	379
UNIVERSUM	339 385
WALKVISION	387
WESDER	382
WHARFEDALE	381
XBOX	388
YAMAHA	316 317 330 344 363
YAMAKAWA	377 384
ZENITH	305 309 333 339 355 383
ZENITH DIVX	339

## Product Specification

### CABLE

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
ALCATEL	036 037
AUSTAR	032
BIRMINGHAM CABLE COMMUNICATIONS	032
BRITISH TELECOM	041
BT	035
CABLETIME	008 011 012 033 034
CANAL PLUS	020
CLYDE CABLE VISION	017
COMCRYPT	020
CRYPTOVISION	015
DECSAT	010
DECSAT CANAL	010
FILMNET	018 020
FRANCE TELECOM	013 029 036 037 044
GEC	017
GENERAL-INSTRUMENTS	032
GRUNDIG	007 016
HYPERVISION	045
JERROLD	001 030 032 041
KABELVISION	030
MACAB	029
MNET	020 042
MOVIE TIME	028
MR ZAPP	029
NOKIA	046
NOOS	029
NSC	028
NTL CABLETELL	032
OPTUS	032
PACE	047
PHILIPS	013 023 029 045 048
PIONEER	002
PVP STEREO VISUAL MATRIX	041
PVP STEREO-VISUAL	030
SAGEM	029
SALORA	003
SAMSUNG	002 024
SATBOX	004
SCIENTIFIC ATLANTA	005 006 026
STS	028
SUPERCABLE	032
TELE PLUS ONE	020
TELEPIU	020
TELESERVICE	011 014
TORX	041
TUDI	027
UNITED CABLE	001 030 041
VIDEOTRON	031
VIDEOWAY	031
VISIOPASS	009 013 029
WESTMINSTER	035
ZENITH	014

## Product Specification

### SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
ABSAT	466 469
AEGIR	479
AIWA	441
AKAI	333 404
ALBA	345 317 324 356 367 370 404 411 426 467 480 495 501
ALDES	433 468 479 495 501
ALLANTIDE	492
ALLSAT	333 348 359 377 501
ALLSONIC	433 468 526
ALLTECH	345 437 525
ALPHA	333
ALTAI	347
AMITRONICA	345
AMPERE	347 457 507
AMSTRAD	345 306 347 371 397 432 465 474 475 457 512 516 449 527
	528
ANGLO	345
ANKARO	345 351 433 461 462 467 468 526
ANTTRON	317 377 480
APOLLO	317
ARCON	325 351 379 432 436 461
ARMSTRONG	333 475
ARTHUR MARTIN	430
ASA	309
ASAT	325 333
ASLF	345
AST	427 494
ASTACOM	471 472
ASTON	332 395
ASTRA	313 321 325 398 399 464 475 478 490 522 523
ASTRO	306 391 394 418 476 477 479 480 481 482 483 526
ATLANTIDE	492
AUDIOTON	359 480
AUSTAR	512
AVALON	347
AXIS	354 510 523 526
BARCOM	321 351
BEKO	367
BEST	351 526
BLAUPUNKT	390 476
BLUE SKY	345 449
BOCA	463 469 475 457 499 507 522
BRAIN WAVE	394 461
BRANDT	369
BRITISH SKY BROADCASTING	350 527
BROADCAST	313
BROCO	345 523
BRUNS	433
BSKYB	527
BT	404 471 472 529
BT SATELLITE	471
BUBU SAT	345
BUSH	324 348 356 370 377 406 426 495
BVV	461
CAMBRIDGE	306 404 499
CAMBRIDGE ARD200	404
CANAL DIGITAL	428

## Product Specification

### SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
CANAL SATELLITE	428 491 511
CANAL PLUS	428
CANARY	437
CARAT.SOM	354
CHANNEL MASTER	495
CHAPARRAL	312 434
CHESS	497
CITYCOM	435 464 503 504 530
CLARK	480
CLATRONIC	394
CLEMENS KAMPHUS	433 492 510
CNT	479
COMMANDER	461 462
COMMLINK	468
COMMUNICADO	354
COMTEC	354 468
CONDOR	464 526
CONNEXIONS	347 396 526
CONRAD	306 310 464 469 526 530
CONTEC	354 435 469
COSAT	359
CROWN	475
CRYPTOVISION	367
CYBERMAXX	416
CYRUS	337
DAERYUNG	347
DAEWOO	342 345 317 325
DANSAT	348 377
DAUMLING	463
D- BOX	366 514
DDC	495
DECCA	338
DELFA	512
DEW	325 354
DIAMOND	525
DIRECTV	444
DISCOVERER	497
DISEQC	471 472
DISK EXPRESS	351
DISMOND	525
DISTRATEL	419 446 447 449 459 485
DISTRISAT	333 359
DNR	461
DNT	333 337 347
DRAKE	329
DST	317
DUAL	325
DUNE	526
DYNASAT	496
ECHOSTAR	345 321 347 372 386 388 428 511 513
EIF	314 498
EINHELL	345 306 317 397 463 468 469 475 457 492 522
ELEKTA	479
ELSAT	371
ELTA	317 333 359 526
ELTASAT	359
EMANON	317

## Product Specification

### SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
EMME ESSE	433 513 526
ENGEL	345
EP SAT	367
EURIEULT	485 449
EUROCRYPT	321 367
EURODEC	410 532
EUROPA	306 333 461 462 464 469 512
EUROPEAN	463
EUROSAT	475 525
EUROSKY	464 475 457 526
EUROSTAR	341 464 515 533 534
EUTRA	437 503
EXATOR	317 404 480
FAGOR	359
FERGUSON	323 348 367 377 406 408 411 424 506
FIDELITY	306 371 397
FINLANDIA	321 367
FINLUX	309 310 321 367 520
FINNSAT	410
FLAIR MATE	345
FORCE	368
FOXTEL	535
FRACARRO	317 387 496 513
FREECOM	317 493 501
FREESAT	437
FTE	345 360 380 436 437 469 496 499 512 526
FUBA	310 314 317 321 347 351 388 435 476 520 526
G SAT	377 430 492
GALAXI	351
GALAXIS	354 359 364 433 461 468 509 510 511 512 523 526 536 537
	538
GALAXISAT	427
GARDINER	504
GIUCAR RECORD	307 389
GMI	475
GOLDBOX	428 491 511
GOLDSTAR(LG)	379 407 493
GOODMANS	367 411
GRAETZ	388 399
GRANADA	321 399
GRANDIN	485 539
GROTHUSEN	317 493
GRUNDIG	302 303 367 390 397 471 472 476 449 527 540 541 542
HANSEATIC	497
HANTOR	317 394
HANURI	479
HARTING UND HELLING	433 492
HASE & IGEL	461
HELIOCOM	464
HIGH PERFORMANCE	385 422
HINARI	317 377 495
HIRSCHMANCE	390
HIRSCHMANN	306 309 310 347 381 413 433 471 472 476 492 496 503 516
	519 543
HISAWA	394
HITACHI	367 406 411 420
HNE	465



## Product Specification

### SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
HOUSTON	359 371 461 462 471
HUMAX	512 536 544
HUTH	313 354 359 394 433 436 461 462 463 464 468 469 475 457
ICX	438
IKUSI ALLSAT	436
IMEX	485
IMPERIAL	426
INGELEN	388 399
INNOVATION	416
INTERNATIONAL	457
INTERTRONIC	475
INTERVISION	359 464 470
INVIDEO	513
ITALTEL	513
ITT	321 367 388 399 420 423
ITT NOKIA	309 310 321 367 388 399 420 423 514
JEEMON	359
JERROLD	438
JOHANSSON	359 394
JOK	471 472 500 529
JSR	359
JVC	303 404
KAMM	345 515
KATHREIN	345 333 337 380 381 384 390 391 394 396 412 414 418 435
	466 476 480 492 496 504 518 546
KEY WEST	463
KOLON	317
KONIG	464
KOSCOM	510
KOSMOS	380 381 433 493
KR	359 437 480 503
KREISELMEYER	476
K- SAT	345
KYOSTAR	317 480
KYOTO GMI ATLAN	443
L&S ELECTRONIC	526
LASAT	354 464 475 479 457 499 522 526
LEMON	461 462 547
LENCO	345 317 325 360 379 461 462 464 493 521 523 526
LENNOX	359
LENSON	306
LEXUS	333
LEYCO	404
LIFESAT	497 526
LIFETEX	416
LION	492
LOEWE	475
LOKIA	388
LORENZEN	461 462 463 464 465 457
LORRAINE	493
LUPUS	526
LUXOR	306 310 321 388 397 399 420 423 425 430 514
LYONNAISE	410
M&B1	497
MACAB	384 525 532 548
MAGAI	380
MANATA	345 471 472

## Product Specification

### SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
MANHATTAN	359 367 406 411 451 471 472 479 510 521
MARANTZ	333 337
MASCOM	381
MASPRO	345 302 303 393 396 406 408 413 437 461 476 542
MASTER S	435
MATSUI	303 320 409 471 472 476 495
MAX	464
MB	497
MEDIABOX	491 511
MEDIAMARKT	475
MEDIASAT	306 428 491 511 523
MEDION	345 526
MEDISON	345
MEGA	333
MELECTRONIC	504
MEMPHIS	354 434
METRONIC	345 317 417 419 421 431 446 447 449 450 451 438 453 454 456 457 458 459 468 475 479 480 485 504
MICRONIK	549
METZ	390 476
MICRO	464 480
MICRO ELECTRONIC	345
MICRO MAXX	416
MICRO STAR	416
MICRO TECHNOLOGY	345 490 492 523
MICRO TEC	345
MINERVA	303 390
MITSUBISHI	367 390
MITSUMI	522
MORGAN	345 333 359 432 463 469 475 457 499 507 522 550
MULTICHOICE	400 535
MULTISTAR	380
MURATTO	427 493
MYSAT	345
MYRYAD	337
NAVEX	394
NEC	330 373
NEIRU	379
NETA P562 / P563	439
NETWORK	377
NEUHAUS	345 306 359 461 462 464 469 510 523
NEUSAT	345 461 510
NEXTWAVE	438
NIKKO	345 475 501
NOKIA	309 310 321 352 353 355 361 366 367 388 399 405 420 423 511 514 542 551
NOMEX	521
NORCO	521
NORDMENDE	317 367 479 495 506
NOVIS	394
NTC	433 503
OCEANIC	492 525
OCTAGON	317 325 354 461 462 480
OKANO	380 433 475
OLYMPIC	433
ONDIGITAL	487 488 489
OPTEX	359 435 496 508

## Product Specification

### SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
OPTIMA	433
ORBIT	325 492 494
ORBITECH	306 317 403 469 481 524
ORIGO	426 521
OSAT	397
OTTO VERSAND	390
OXFORD	404
PACE	311 344 348 350 362 367 377 398 408 424 489 502 527 542
	552 553
PACE MSS SERIES	367
PACIFIC	525
PACKSAT	471 472
PALCOM	392 495
PALLADIUM	303 306 317 475
PALSAT	306
PANASAT	535 554
PANASONIC	331 367 424 527
PANDA	321 348 367 464 476 510
PATRIOT	404
PHILIPS	302 303 319 333 337 351 367 377 424 428 444 456 461 462
	469 471 472 476 480 487 488 491 504 511 518 529 542
PHOENIX	354 377
PHONOTREND	359 433 442 468 512
PIONEER	428 491 511
PIXX	555
PK SAT	492
PLANET	426 513
POLSAT	410
POLYTRON	347 435
PREDKI	317 394
PREISNER	347 403 463 469 475 457 499 522
PREMIER	359 433
PREMIERE	491 511 514
PROMAX	367
PROSAT	356 468 495 470
PROSONIC	465
PROTEK	492 525
PROTON	492
PROVISAT	501
PROVISION	479
PYE	303
PYXIS	508 510
QUADRAL	467 468 469 470 471 472 473 495 526
QUELLE	390 397 464 465
QUIERO	410
RADIOLA	333 337
RADIX	347 437 516
RAINBOW	437 480
RC	438
RC- 1000	404
RED STAR	526
REDPOINT	523
REDSTAR	526
RFT	333 337 461 462 468 524
ROADSTAR	345
ROVER	345 470
SABA	377 408 461 464 471 472 479 500 501 506 449 529

## Product Specification

### SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
SABRE	367
SAGEM	365 505
SAKURA	354 357
SALORA	321 388 399 420 430
SAMSUNG	317 380 427 432 511 543
SAT	306 371 427 494 495
SAT PARTNER	317 394 433 479 480 493 501
SAT TEAM	345
SATCOM	313 464 497
SATEC	345 377 542
SATECO	317
SATELCO	526
SATFORD	313
SATLINE	470
SATMASTER	313
SATPARTNER	317 379 394 433 479 480 493 501
SATSTATION	451
SAVA	377 408 461 464 471 472 479 500 501 506 449
SCHACKE	480
SCHAUB LORENZ	388 399
SCHNEIDER	471 472 518
SCHWAIGER	364 377 414 435 461 464 469 497 449 555
SEDEA- ELECTRONIQUE	317
SEEMANN	347 404 475 523
SEG	317 394 465 478 490 497 526
SELECO	359 513
SEPTIMO	446 451 454
SERV SAT	359
SIEMENS	390 476 499
SILVA	379 493
SINTRACK	313
SKANTIN	345
SKARDIN	523
SKINSAT	306
SKR	345
SKY	334 350 489 527
SKY MASTER	345 433 467 468 470 497 515
SKYLAB	351
SKYMAX	333 492
SKYSAT	497
SKYVISION	359
SL	461 465 475 457
SMART	457
SM ELECTRONIC	345
SONY	367 511 527
SR	522
STARLAND	345
STARRING	394
STARSAT	380
STRONG	317 325 335 336 339 479 480 457 496 511 526 535
STV	314
STVI	314 437
SUMIDA	475
SUNNY SOUND	526
SUNSAT	345 523
SUNSTAR	463 475 457 522 526
SUPERNOVA	489

## Product Specification

### SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
TAGRA	359
TANDBERG	308
TANDY	385 422
TANTEC	367 408
TATUNG	374 367
TCM	416
TECHNILAND	313 359
TECHNISAT	305 306 328 333 347 384 402 403 481 484 524
TECHNOWELT	464
TECO	325 475 522
TELASAT	464 497
TELECIEL	480 501
TELECOM	345
TELEDIREKT	377
TELEFUNKEN	317 383 471 472
TELEKA	302 306 347 381 403 480 461 464 475 503 510
TELEMASTER	479
TELEMAX	318
TELESAT	464 497
TELESTAR	306 340
TELETECH	515
TELEVES	306 367
TELEWIRE	359
TENSAI	325 394
TEVION	416
THOMSON	345 349 367 428 455 464 471 472 491 505 506 511
THORENS	525
THORN	367
THORN- FERGUSON	323 348 367
TIOKO	435 475
TLEWIRE	359
TOKAI	333
TONNA	345 306 313 359 367 471 510
TOSHIBA	367 445
TPS	505
TRENDLINE	522
TRENDPLAIN	522
TRGRA	388
TRIACL	384
TRIAD	385 401 427 492 493 494
TRIASAT	306 520
TRIAX	345 306 333 347 511 520 530
TRISTAR	325
TWINNER	415 419
UNIDEN	316 358 371 375 376 380 448 508
UNISAT	333 354 475
UNITOR	351 394
UNIVERSUM	303 309 371 464 465 476
VAIADIGITAL	378
VARIOSAT	476
VARIOSAT	476
VECTOR	478 492
VENTANA	333 337
VESTEL	465
VIDEOCRYPT	323
VIDIO WAY	315
VIPER	354

## Product Specification

### SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
VISIOSAT	345 494 500
VIVA	461 462
VORTEC	317 382 383 432 442
VTECH	427 494 500 504
WELA	345 463 469 457
WETEKOM	306 497 507
WEVASAT	492
WEWA	367 492
WIBO	475
WINERSAT	394
WINTERGARTEN	468
WISI	304 306 322 326 327 343 347 367 388 423 427 464 469 476
	494 500 510
WITTENBERG	371
WOLSEY	385 422
WOORISAT	479
WORLD	394
WORLDSAT	471 472
XCOM	469
XRYPTON	526
XSAT	345 346 466 469
XCOM MULTIMEDIA	346
YES	489
ZAUNKONIG	461
ZEHNDER	340 351 380 414 427 435 465 479 504 526 555
ZENITH	334
ZETA- TECHNOLOGY	333
ZODIAC	480
ZWERNASE	463 475

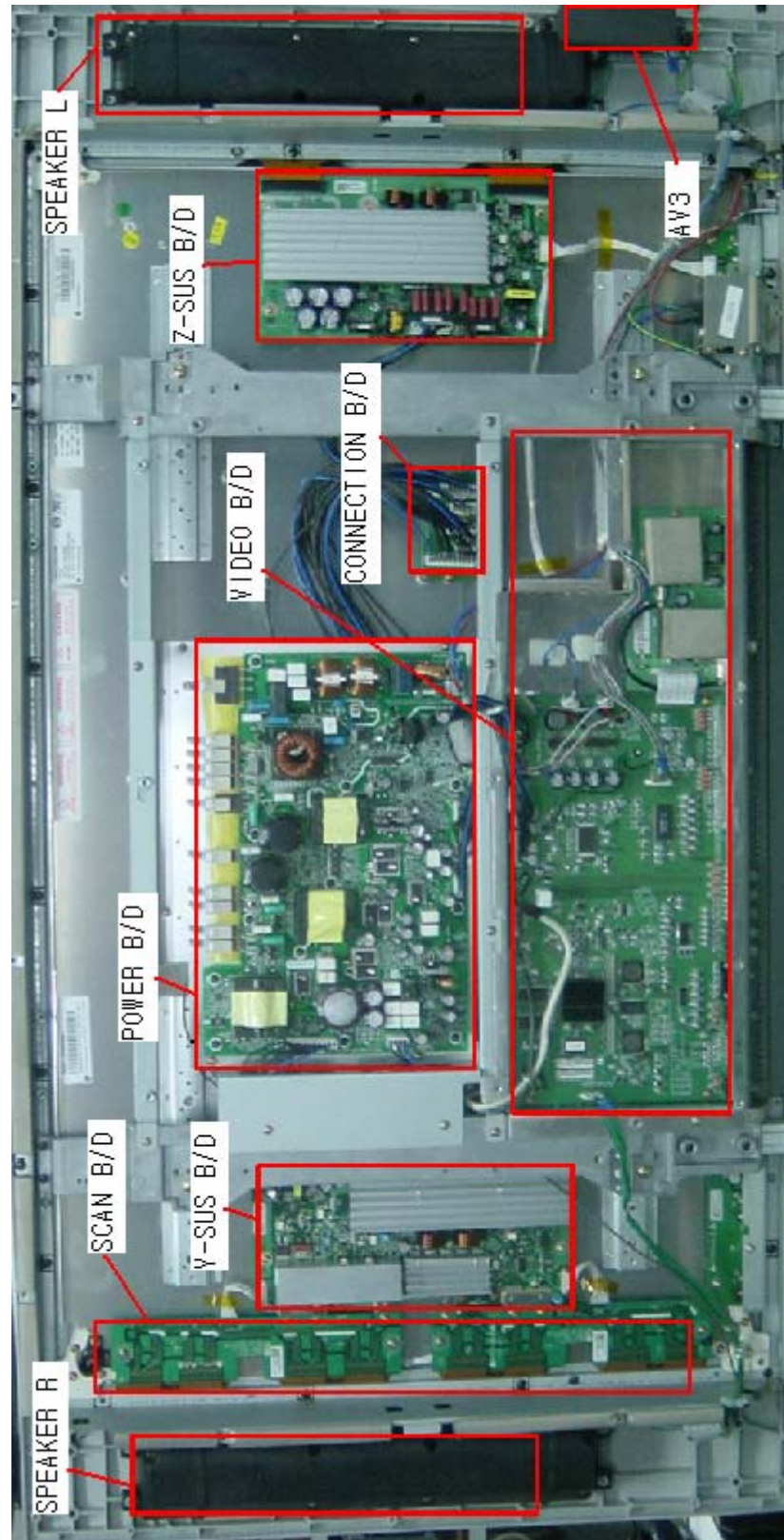
## Product Specification

### VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
TOKAI	015 029 055 090
TOKIWA	029
TOPLINE	166
TOSHIBA	009 044 053 065 090 112 153 155 175
TOTEVISION	056
TOWADA	029 030
TRAKTON	061
TRANSONIC	155
TRIUMPH	011
TVA	061
UHER	044 055 056 057 096
ULTRAVOX	021 155 159 160
UNIC RADIO	148
UNITECH	056
UNITED QUICK STAR	021
UNIVERSUM	039 051 055 056 057 065 103 113 147 148 155 158 160 164
	166 175 180
UNIVOX	155
URANYA	155 160
VEXA	155
VICTOR	044 047
VICTOR RESEARCH	036
VIDEO TEC	148
VIDEOMAGIC	055
VIDITAL	160
VILLAIN	039
WARDS	060
WATSON	033 065 155 159
WATTRADIO	159 160
WELTBlick	055 155
WHITE WESTINGHOUSE	160
XENON	032
YAMAHA	036 044
YAMISHI	021 029
YOKAN	029
YOKO	029 055 056 057 061 148 155 171
ZANELA	148
ZANUSSI	044 090
ZENDER	090
ZOPPAS	044

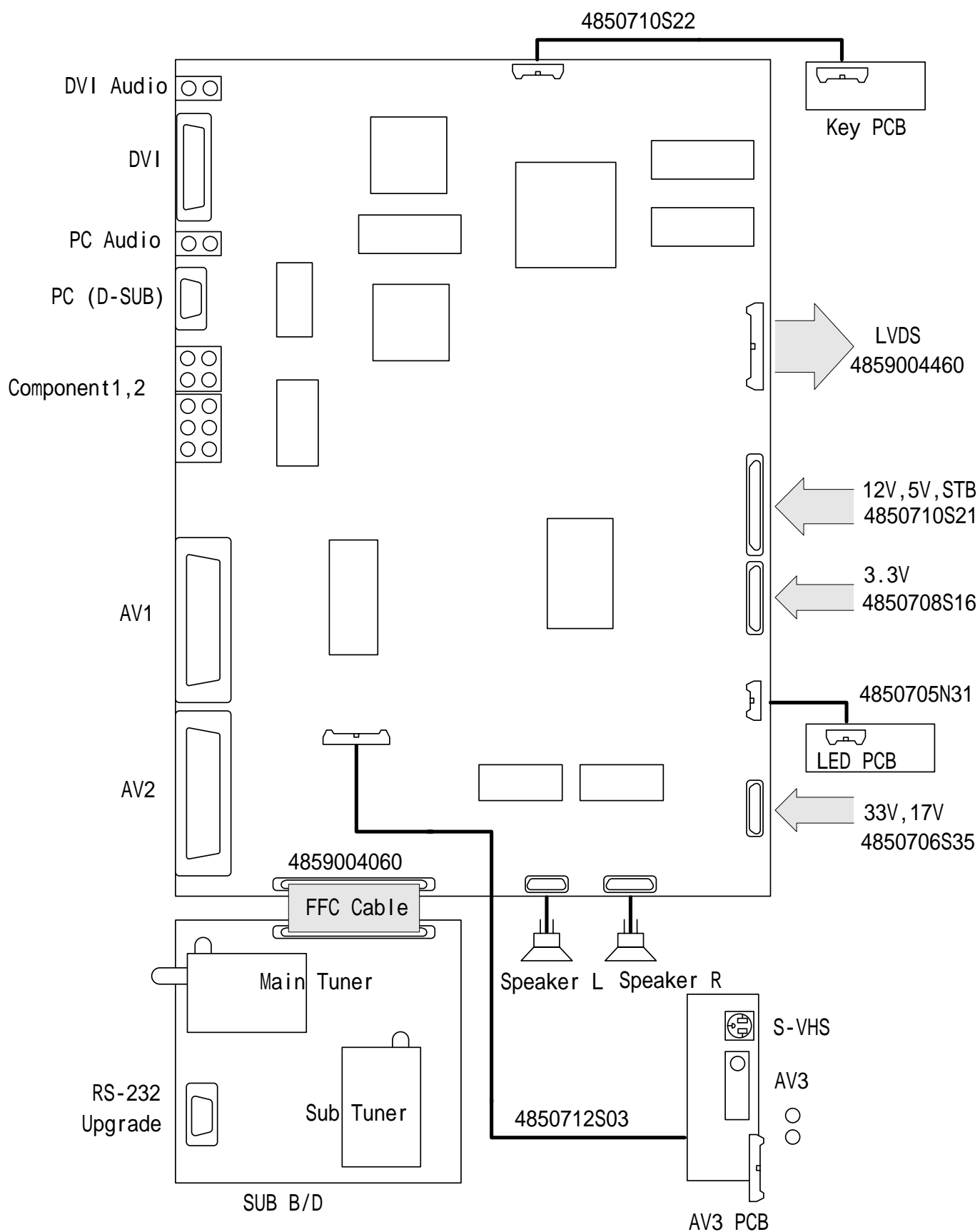
### 3. The Features of Inside

#### DPP-42A1LASB Inside Features





## 4. DPP-42A1LASB Block Diagram



## 5. Default Setting in User Menu OSD

### 1. Picture Mode

#### 1) Mode

	Normal	Dynamic	Cinema	User
Brightness	50	40	55	Undefined
Contrast	50	80	35	Undefined
Sharpness	8	10	6	Undefined
Colour	50	55	45	Undefined
Tint	50	50	50	Undefined

- DVI & PC Input – Only brightness and contrast are available.

#### 2) Default value of other functions in picture mode

Function	Default Value
Colour Temp	Normal
N.R.	NR1
CTI	On

- N.R. means the noise reduction
- DVI & PC don't support N.R. and CTI functions

### 2. Sound

#### 1) Mode

	Normal	Movie	Music	News	User
120 Hz	32	50	48	15	Undefined
500 Hz	32	38	38	32	Undefined
1.5 kHz	32	28	15	50	Undefined
5 kHz	32	40	42	32	Undefined
10 kHz	32	48	56	15	Undefined

#### 2) Default value of other functions in sound mode

Function	Default Value
Balance	0
Effect	Off
AVC	Off

## Default Setting in User Menu OSD

### 3. Screen

	16 : 9	4 : 3	Panorama	LB (16:9)	LBS (16:9)	14 : 9	LB (14:9)	LBS (14:9)	Auto
Component	O	O	O	X	X	X	X	X	X
TV	O	O	O	O	O	O	O	O	O
AV	O	O	O	O	O	O	O	O	O
PC	O	O	O	X	X	X	X	X	X
DVI	O	O	O	X	X	X	X	X	X

- H. Position, V. Position, and Auto screen size is available only in PC mode.

### 4. Features

#### 1) Mode

Function	Background	Language	Child Lock	MGDI	Auto Power
Default Value	10	English	Off	On	Off

- DVI & PC don't support MGDI function.

#### 2) Time Setting

Function	Clock	Auto Clock	Off Timer	Off Time	Wake Timer	Wake Time	Wake Prog.	Wake Vol.
Default Value	Undefined	On	Off	PM 12:00	Off	PM 12:00	1	20

#### 3) ISM

Function	Pixel Shift	Low Bright	Image Invert
Default Value	Off	Off	Off

## 6. Service Mode

To enter SERVICE MODE,

A. Press “ ◀VOL ” -> “ MUTE ” -> “ RECALL ” -> “ MUTE ” button of remote controller (R-53J17)

or

B. Press “ S9 ” button of SERVICE REMOTE CONTROLLER.

[Note] In the first line, there is the model name and the version of the upgraded program on the PDP set.

### 1. Default Value of Pw318B\_1 and Pw318B\_2

	Sub Bias	Sub Gain	Bias R	Bias G	Bias B	Gain R	Gain G	Gain B
Pw318B_1	32	12	25	23	38	12	16	20
Pw318B_2	32	12						

#### 1) Pw318B\_1

- Sub Bias : For BRIGHTNESS adjustment (All inputs)
- Sub Gain : For CONTRAST adjustment (All inputs)
- Bias R : For R BRIGHTNESS adjustment (All inputs)
- Bias G : For G BRIGHTNESS adjustment (All inputs)
- Bias B : For B BRIGHTNESS adjustment (All inputs)
- Gain R : For R CONTRAST adjustment (All inputs)
- Gain G : For G CONTRAST adjustment (All inputs)
- Gain B : For B CONTRAST adjustment (All inputs)

#### 2) Pw318B\_2

- Sub Bias : For DVI BRIGHTNESS adjustment
- Sub Gain : For DVI CONTRAST adjustment

### 2. Pw3300\_1

Function	R Offset	G Offset	B Offset	R Gain	G Gain	B Gain
Default Value	100	100	100	94	97	94
Function	Y Offset	Pb Offset	Pr Offset	Y Gain	Pb Gain	Pr Gain
Default Value	105	125	125	90	203	196

- RGB offset values will be set by executing ‘RGB Auto Cal’ in service mode.
- YPbPr offset values will be set by executing ‘YPbPr Auto Cal’ in service mode.

## Service Mode

- The automatically set offset values may different from the default value depend on B/D. However, the main B/D should be replaced or contact Kunpo R&D center in Korea if the **OFFSET** values differ more than  $\pm 20$  from default value.

### 3. Pw3300\_2 & Pw2250

	AV Brt	AV Cont
Pw3300_2	127	75
Pw2250	127	75

### 4. Msp34X0

Function	Sc pScale	Fm pScale	Nic pScale
Default Value	21	25	51

- In Msp34X0,
  - Sc pScale : Prescale adjustment for external input (AV, Component, PC, DVI etc.)
  - Fm pScale : FM/AM prescale adjustment
  - Nic pScale : NICAM prescale adjustment

### 5. Misc

Function	TV Auto Off	TXT Lang	TXT T/F
Default Value	On	Auto	TOP

- Tst Ptn AT shows five cycled patterns (white, black, red, green, blue) every 1 minute automatically
- Tst Ptn MA shows five cycled patterns manually by pressing volume up key.

### 6. Panel

Function	Sync Mode	Bright Mode	Power Mode	Gamma Mode	Panel Temp
Default Value	AUTO	100%	100%	2.2N	**.*

- Panel Temp indicates the current temperature of the panel.

### 7. Reset

- Level 1 – Resets all data in E<sup>2</sup>PROM other than HDCP key, EDID, RGB offset and YPbPr offset of Pw3300\_1.
- Level 2 – Resets all data in E<sup>2</sup>PROM other than the exception of Level 1 and Pw318B\_1.
- Factory – Resets the data of auto search, language setting, time setting, and the user menu values that could be reset by ‘Initialize’ function in Feature mode.

## 7. Power PCB

### 1. Input and Environmental Requirement

Input Requirement	Description	Environment Requirement	Description
Normal Input Voltage	AC100V to AC240V	Operating Temperature Range	-10 to 50 deg.
Input Voltage Variation Range	AC85V to AC276V	Operating Humidity Range	10 to 90 %
Nominal Frequency	50 / 60 Hz	Storage Temperature Range	-20 to 60 deg.
Frequency Variation Range	45Hz to 65Hz	Storage Humidity Range	10 to 90 %
Phase	Single	Cooling Condition	Free Air
Inrush Current	30A zero-pk max. at cold start and any specified line, load and temperature conditions		

### 2. Output Characteristics

Output Circuit	Normal Voltage [V]	Voltage Adjustment [V]	Load Variation [A]	Ripple Noise [mV p-p]
Vs	175	160 – 190	0.4 – 1.5	500 / 500
Vd	60	55 – 65	0.01 – 2.5	300 / 300
5V (ctrl)	5.1	4.75 – 5.25	1.2 – 4.0	30 / 200
5V	5.1	4.75 – 5.25	0.5 – 4.5	50 / 200
DTV3.4V	3.4	--	0.5 – 2.0	50 / 200
DTV2.5V	2.5	--	0.2 – 2.0	50 / 200
33VT	33.0	--	0 – 0.05	100 / 400
12V	12.0	--	0 – 2.0	100 / 400
17V (Audio)	17.0	--	0 – 0.7	100 / 400
-17V (Audio)	-17.0	--	0 – 0.7	100 / 400
5V (STBY)	5.0	--	0.03 – 1.0	50 / 200

### 3. Function of Protection

Protection	Output Circuit	Trip Point	Notes
Over Current	Vs	1.7A or more	Shut down by Under Voltage
	Vd	3.0A or more	Shut down by Under Voltage
	5V (ctrl)	13.0 – 25.5A (Total Current)	Shut down by Under Voltage
	5V		
	12V	1.76A or more	Shut down by Under Voltage

## Power PCB

	33V	0.08A or more	Shut down by Under Voltage
	17V	1.0A or more	Shut down by Under Voltage
	-17V	1.0A or more	Shut down by Under Voltage
Over Voltage	Vs	220V or less	Shut down
	Vd	86V or less	Shut down
	5V (ctrl)	5.5 – 7.0	Shut down
	5V		
	12V	13 – 17V	Shut down
	33V	36 – 44V	Shut down
	17V	19 – 24V	Shut down
	-17V	-19 – -24V	Shut down

### 4. Connector Specification

Connector		CN803 (PV)	CN806	CN804 (PM)	CN801 (PA)	CN805	CN01
Type		YMW025-10R	B10P-VH	YMW025-08R	YMW025-06R	B4P-VH	YFW800-02
Maker		YEONHO	JST	YEONHO	YEONHO	JST	YEONHO
The number of pins		10	10	8	6	4	2
Pin No.	1	5V Stand_by	LVP	3.4V	33VT	5Vctrl	AC(L)
	2	POWER	GND	3.4V	GND	5Vctrl	AC(N)
	3	GND	GND	GND	+17	GND	
	4	GND	GND	GND	GND	GND	
	5	5V	GND	2.5V	GND		
	6	GND	Vd	2.5V	-17V		
	7	GND	Vd	GND			
	8	12V	NC	GND			
	9	12V	Vs				
	10	GND	Vs				

## 8. Power Adjustment

- Power Adjustment – Adjusting to standard power voltages, which are written in the upper right side of PDP module. These values were already adjusted by PDP module makers while producing. Therefore, if there are some problems in picture after adjusting, you should classify that PDP module as a fault and contact to PDP module maker.
- Input Video Pattern – 100 IRE Full White Pattern



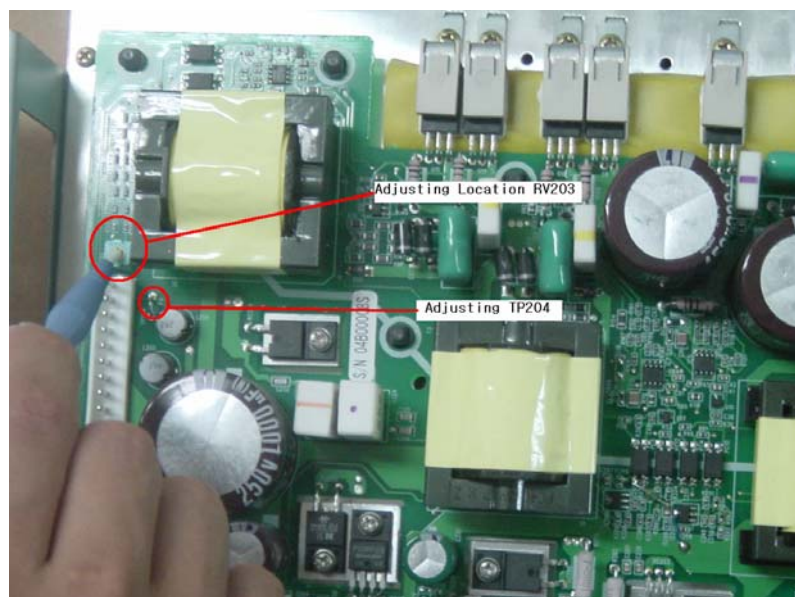
Figure 3. Voltage Adjustment Label

### 1. Vs (Sustain Voltage) : Discharge Sustain Voltage

- Measurement Equipment : Digital Volt Meter (DC volt mode)
- Adjusting TP : TP204
- Adjusting Location : RV203
- Optimum Adjusting Voltage : The voltage which is written in the label located in upper right side of the PDP module. (Typical Voltage : 187V)

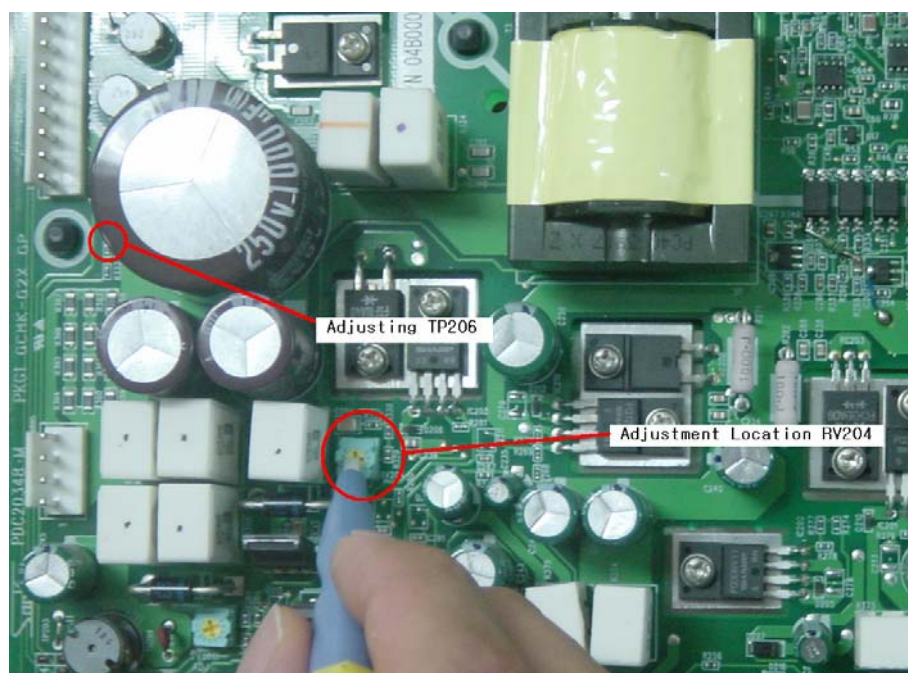


## Power Adjustment



### 2. $V_a$ (Address Voltage) : Data Input Voltage

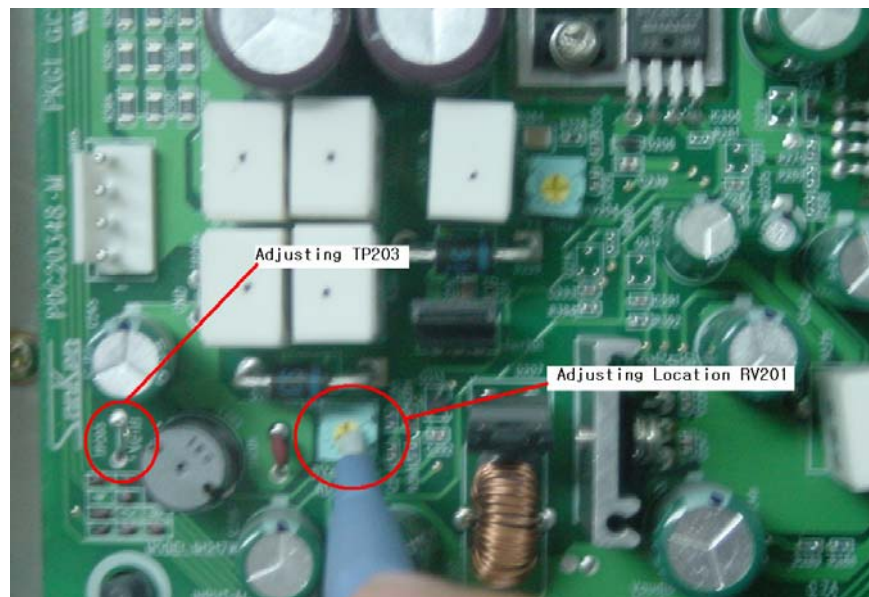
- Measurement Equipment : Digital Volt Meter (DC volt mode)
- Adjusting TP : TP206 ( $V_d$ )
- Adjusting Location : RV204 ( $V_d$  ADJ)
- Optimum Adjusting Voltage : The voltage which is written in the label located in upper right side of the PDP module. (Typical Voltage : 65V)



## Power Adjustment

### 3. 5Vcntl (5V control)

- Measurement Equipment : Digital Volt Meter (DC volt mode)
- Adjusting TP : TP203
- Adjusting Location : RV201
- Optimum Adjusting Voltage : The voltage which is written in the label located in upper right side of the PDP module. (Typical Voltage : 5.2V)

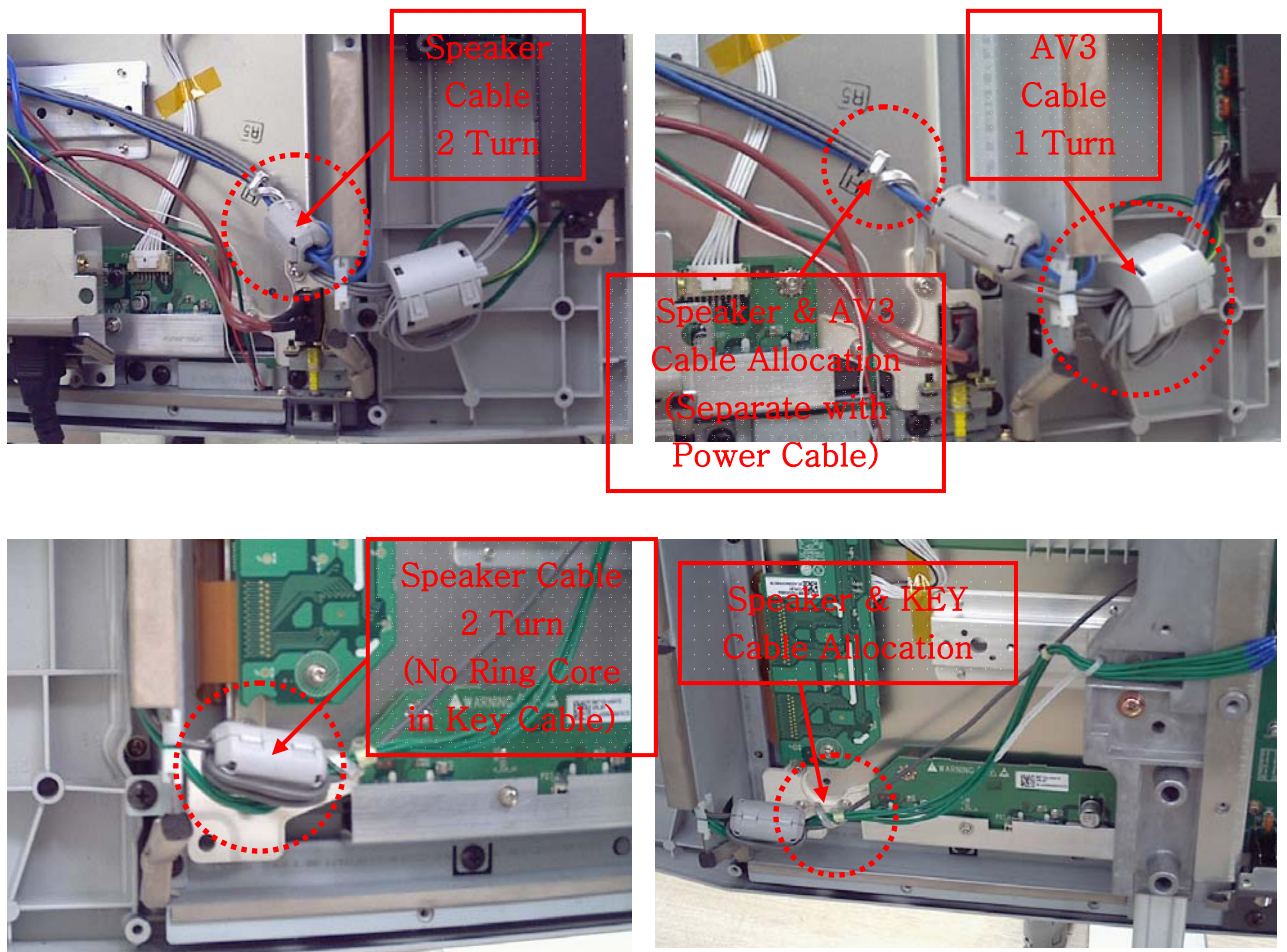


## 9. Noticeable Points While Assembling

### 1. Insertion of Ring Core (EMI Filter) to Speaker Cable (L,R), AV3

#### Cable and their position

- Coil the Ring Core (Filter EMI, S/N: 5PZCA2009A) 2 turns with Speaker Cable (L,R) as shown in the figure below.
- Coil the Ring Core (Filter EMI, S/N: 5PZCAT3035) 1 Turn with AV3 Cable as shown in the figure below.



### 2. Insertion of Ring Core to the Power Cable

- Insert a Ring Core(Filter EMI, S/N : 5PZCA2009A) to 8 pin and 6 pin Power Cable



## Noticeable Points While Assembling



### 3. LVDS Cable Connection

→CABLE LVDS, S/N : 4856818800

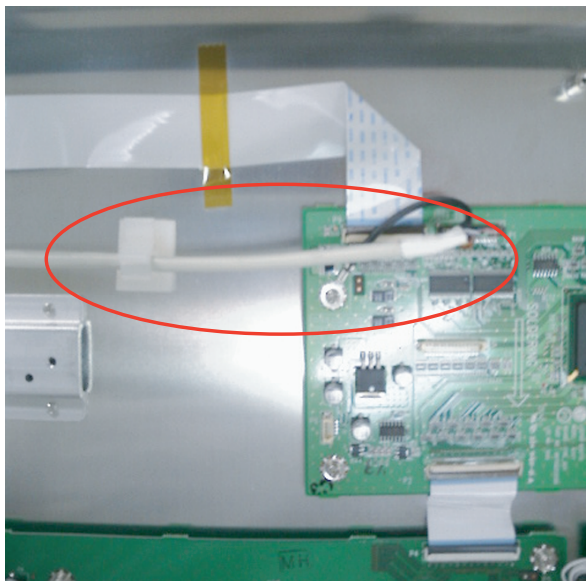
a. DIGITAL B/D part

→ CLAMP WIRE, S/N : 4856818800

→ CLAMP WIRE, S/N : 4856815900

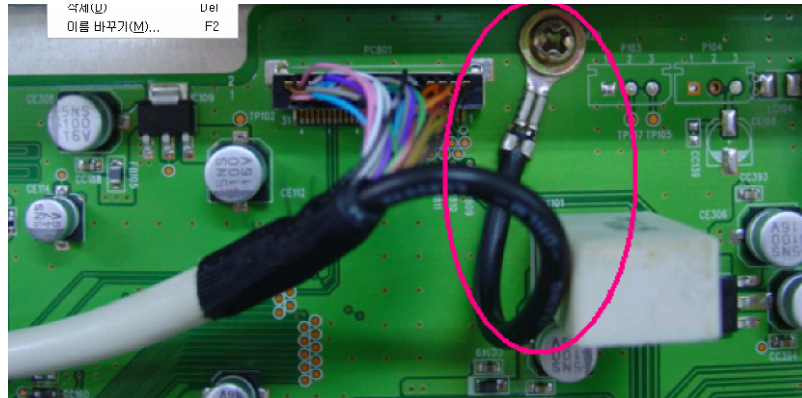
(Place these CLAMP WIRES as shown in the figure below)

\* Make LVDS Cable not to touch on the Terminal Plate while connecting.



b. VIDEO B/D part

## Noticeable Points While Assembling



### 4. Shieldron Tape on SCART Input

→ Tape EMI, S/N : 485A100071

(Position: From top of Scart to Terminal Channel Gasket)



### 5. Shieldron Tape on DVI Input

→ Tape EMI, S/N : 485A100571

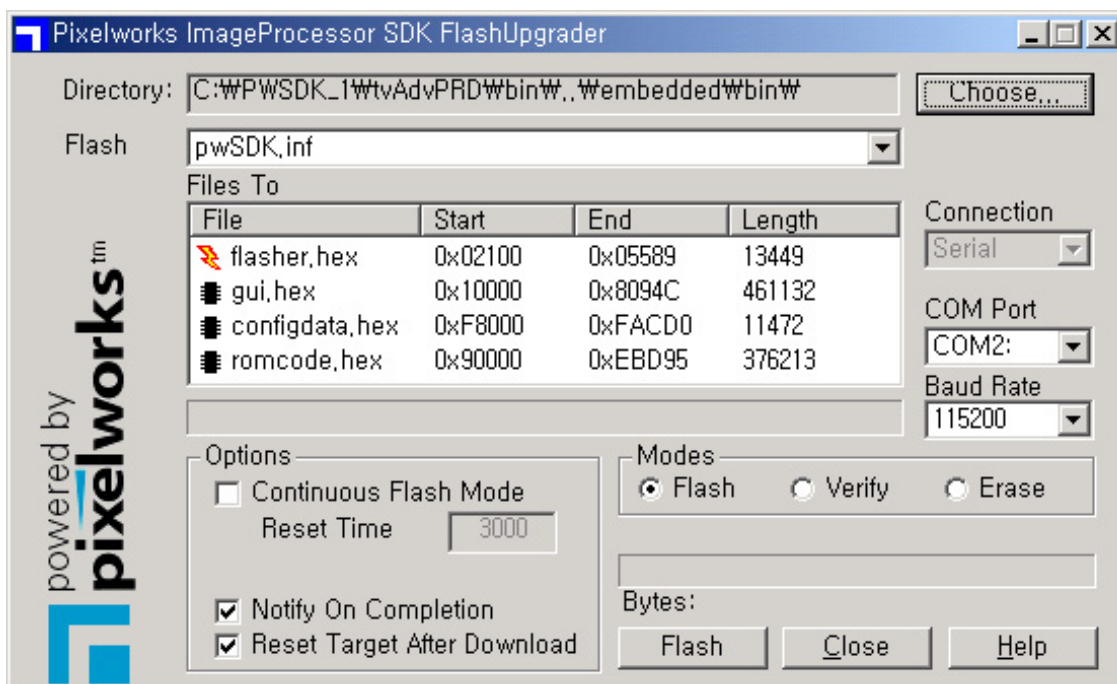
(attach vertically, 3 X 4.2 Cm)

(Position: From top of DVI to Terminal Channel Gasket)

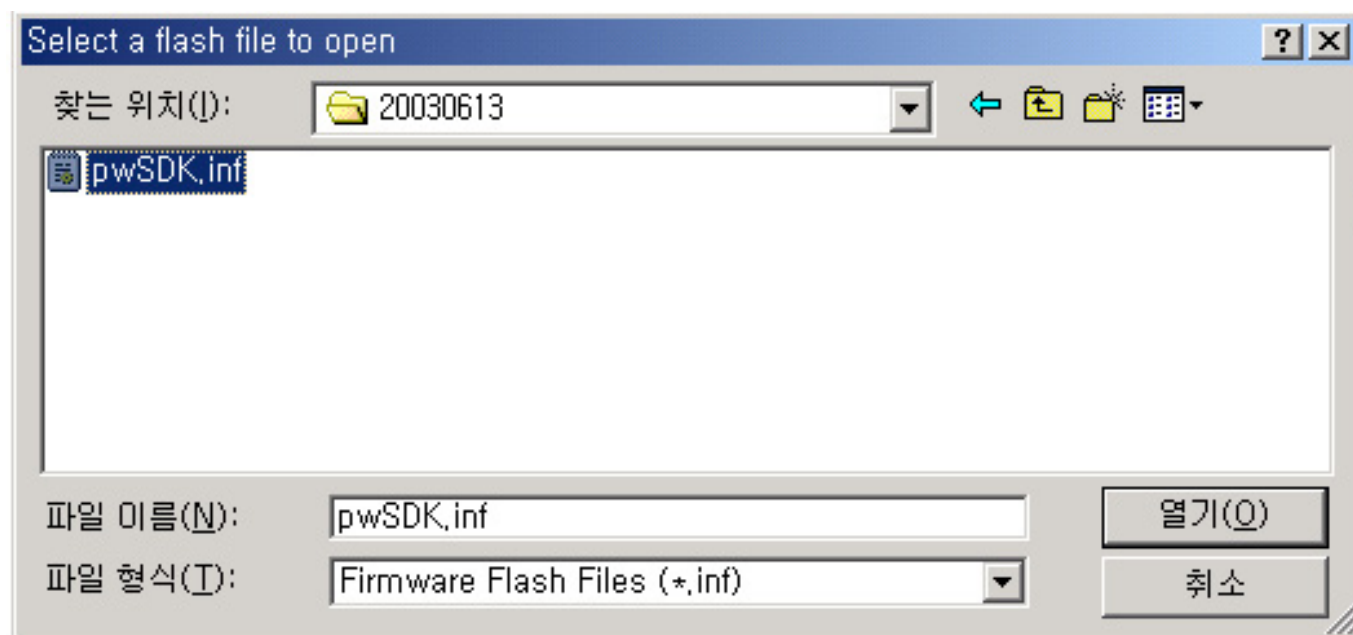


## 10. Software Upgrade Method

1. Check whether MAIN PCB is connected to SUB PCB (PA901 to P901).
2. Connect 9-PIN serial cable to the serial port of the computer.
3. Connect the opposite end of the serial cable to RS-232C port of SUB PCB.
4. Run Flashupgrader.exe in the PC to excute the program as shown below.

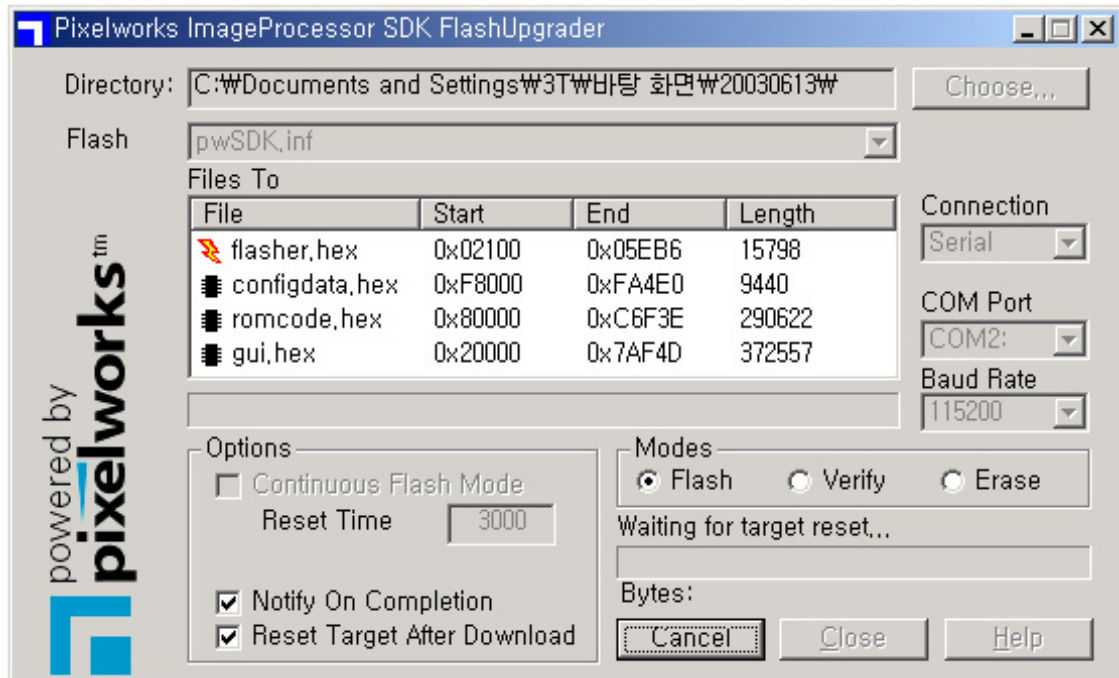


5. Select current Upgrade file
  - Click "Choose..." button to select the file you want to upgrade.
  - Select the file (pwSDK.inf) that you want to upgrade.

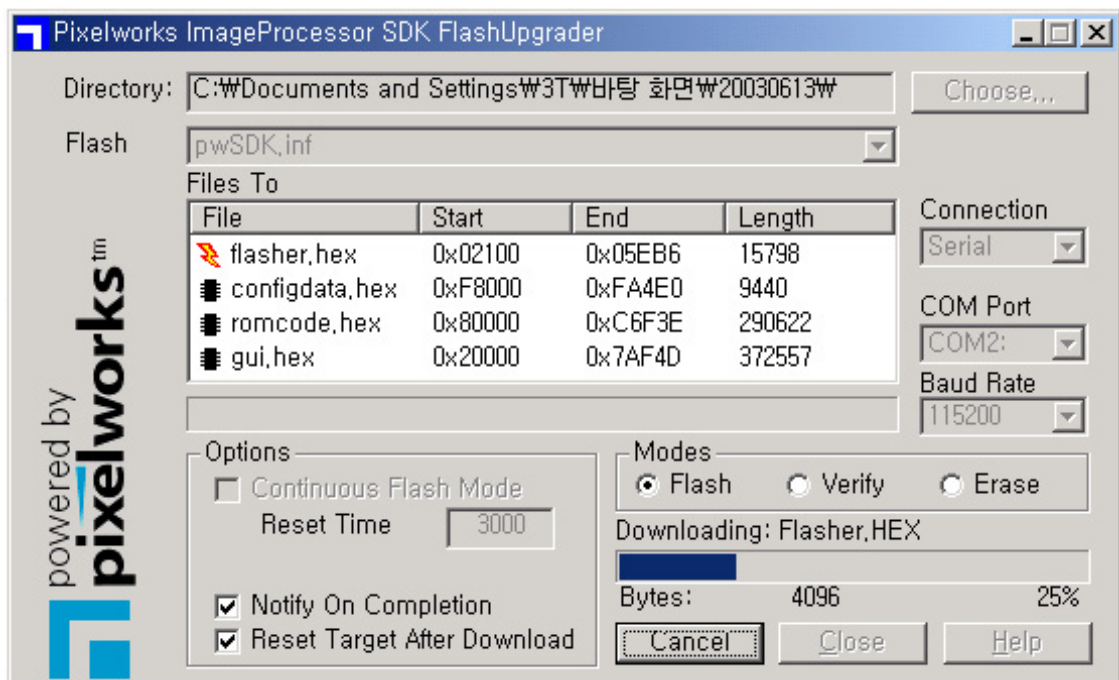


## SOFTWARE UPGRADE Method

6. Select correct COM Port and Baud Rate(115200) as shown below. Then press Flash button to finish setup.



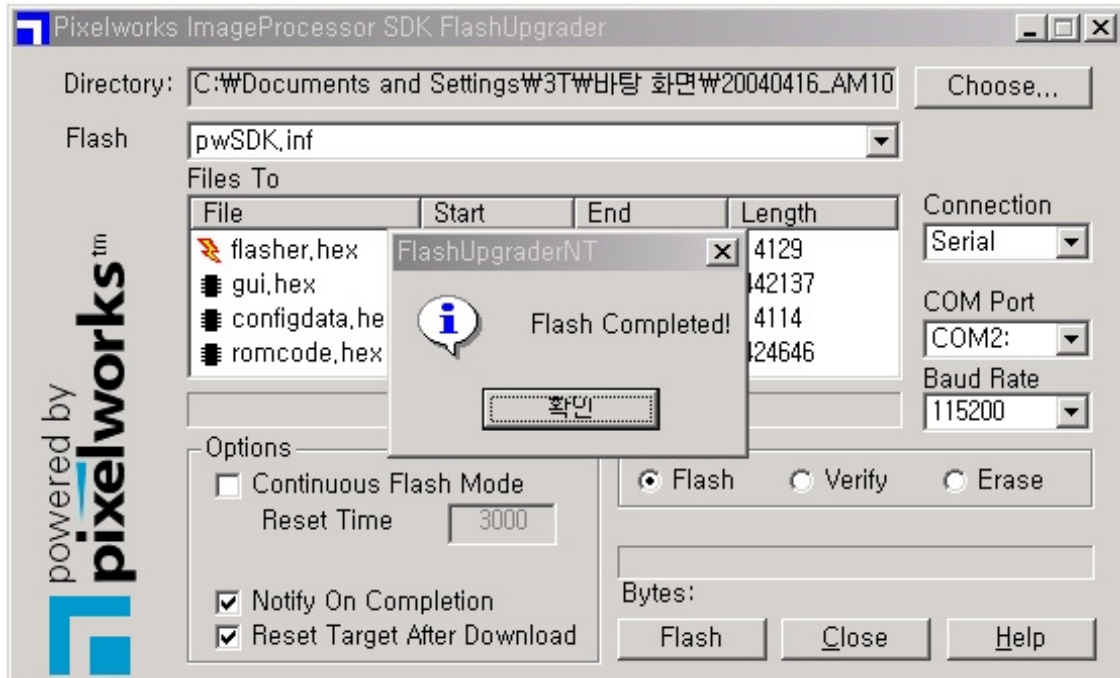
7. Turn on the ac power and then upgrade program will start the download as shown below.





## SOFTWARE UPGRADE Method

8. When the upgrading is complete, a window (below) will be opened. Press “Finish” button to complete the process.





## 11. Trouble Shooting

### *Before starting Trouble Shooting*

- Trouble diagnosing and repairing of set mean find out which PCBs or blocks are not working and replace them with new PCBs. Repairing the broken PCBs are not necessary. Keep the broken PCBs and return them to service center or R&D center.
- This Trouble Shooting list only contains representative and simple PCB trouble diagnosis and Module Exchange method. Therefore, if you find sets that are difficult to diagnose or to repair, contact R&D center.
- Basic Trouble Diagnosis procedure
  - 1) Check problem Symptoms
  - 2) Open Back Cover
  - 3) Trouble Diagnosis & Replace broken PCB
  - 4) Adjust new PCB module
  - 5) HEATRAN for at least 30 minutes, inputting Full White test pattern
  - 6) Full Function test
  - 7) Repair Complete
- Required Equipment for trouble diagnosis
  - 1) Digital Multimeter (User Mode : measure DC Voltage, measure Diode Voltage, Short-open test)
  - 2) Screwdriver (or electric screwdriver), Plastic adjusting tool
  - 3) Oscilloscope (for detailed examination only)
- Before replacing PCBs, you MUST turn the AC switch “OFF”.
- After replacing High Voltage Board (Power PCB, Y-SUS, Z-SUS, Data B/D, Scan B/D), and Main & Sub PCB, extra adjustment might be needed. (Refer to Power Adjustment)
- Dust or extraneous materials may cause bad connections. Therefore, try to apply soft brush, air fresher, or breath to clean the dust or extraneous materials.
- While assembling the set in factory, it could have bad connection. Try to reassemble the necessary connectors and also check the state of the connectors.
- After the set is repaired, leave Back Cover open for followings. Run HEAT RUN for at least 30 minutes by displaying Full White test pattern of Service Mode (Refer to Service Manual I. ‘Service Mode’ part). Check the screen conditions and basic functions (remote control operation etc.)
- After Back Cover is closed, redo HEAT RUN for at least one hour with Full

## Trouble Shooting

White input using Test Pattern of Service Mode. Check the screen conditions and basic functions.

- Caution 1 !!

When disconnecting / connecting connectors, you MUST turn “OFF” the AC power and check the direction and position of the connectors before working.

- Caution 2 !!

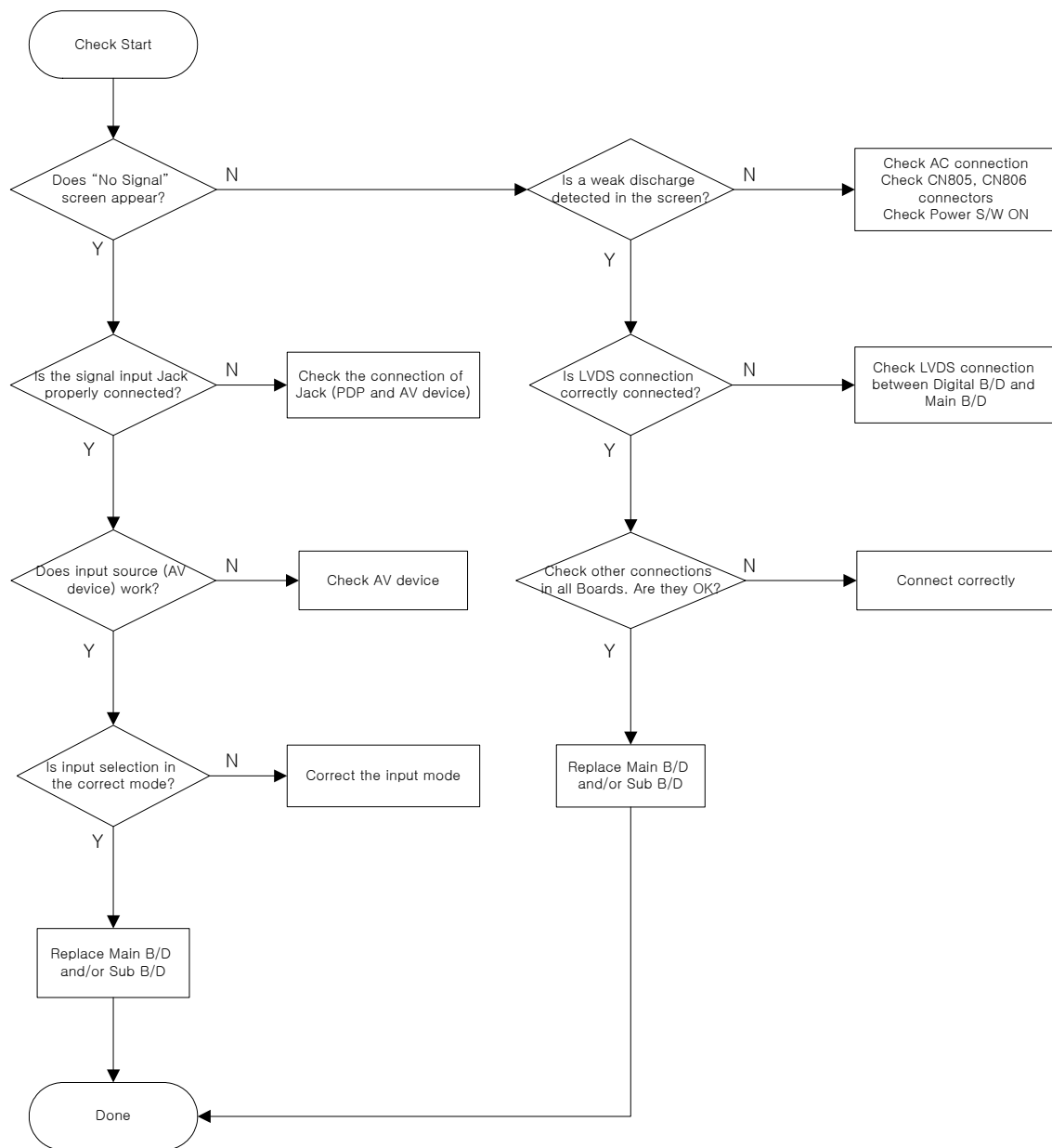
Whenever you reassemble connectors connecting High Voltage Board and POWER PCB (CN805, CN806), remaining voltage still exists in the POWER PCB could cause electric shock and damage the set. Therefore always reassemble the connectors several minutes after AC power is off. To be more careful, using a Multimeter you should check to see if  $V_s$  is less than 10V and then connect connectors.

### *Definition*

- Red LED – Stand by state (ready for operating)
- Green LED – The set is turned on and operating
- Shut Down – While green LED, power PCB does not make any operating sound or noise (i.e. Power relay does not operate normally)
- Weak Discharge – The screen looks like BLACK, but there are little discharged cells on the screen
- Abnormal Discharge – Shows unexpected discharged cells on the image
- No Signal – OSD is working but no images are displaying
- No Raster – Not even OSD is displaying

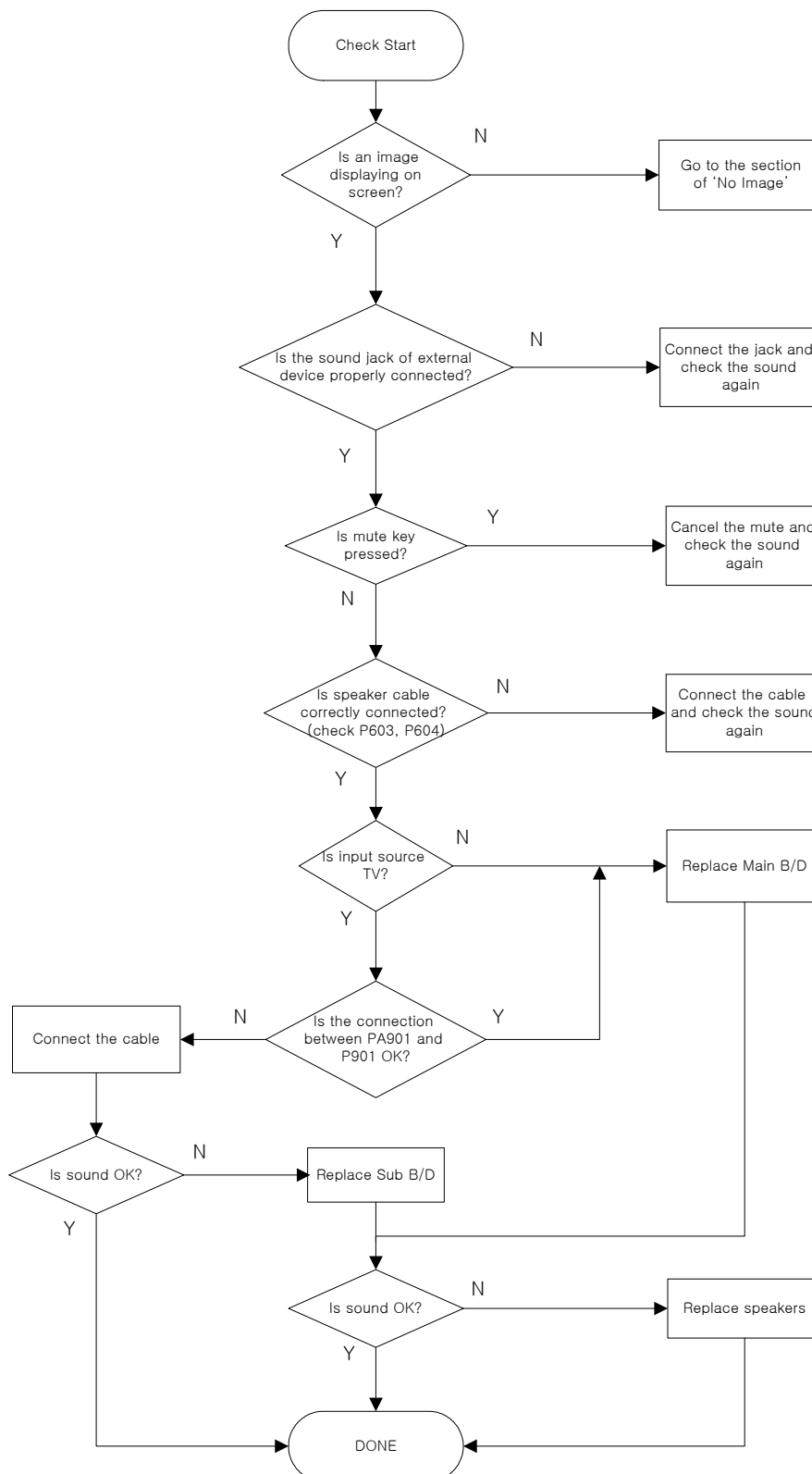
# Trouble Shooting

## 1. No Signal or No Raster



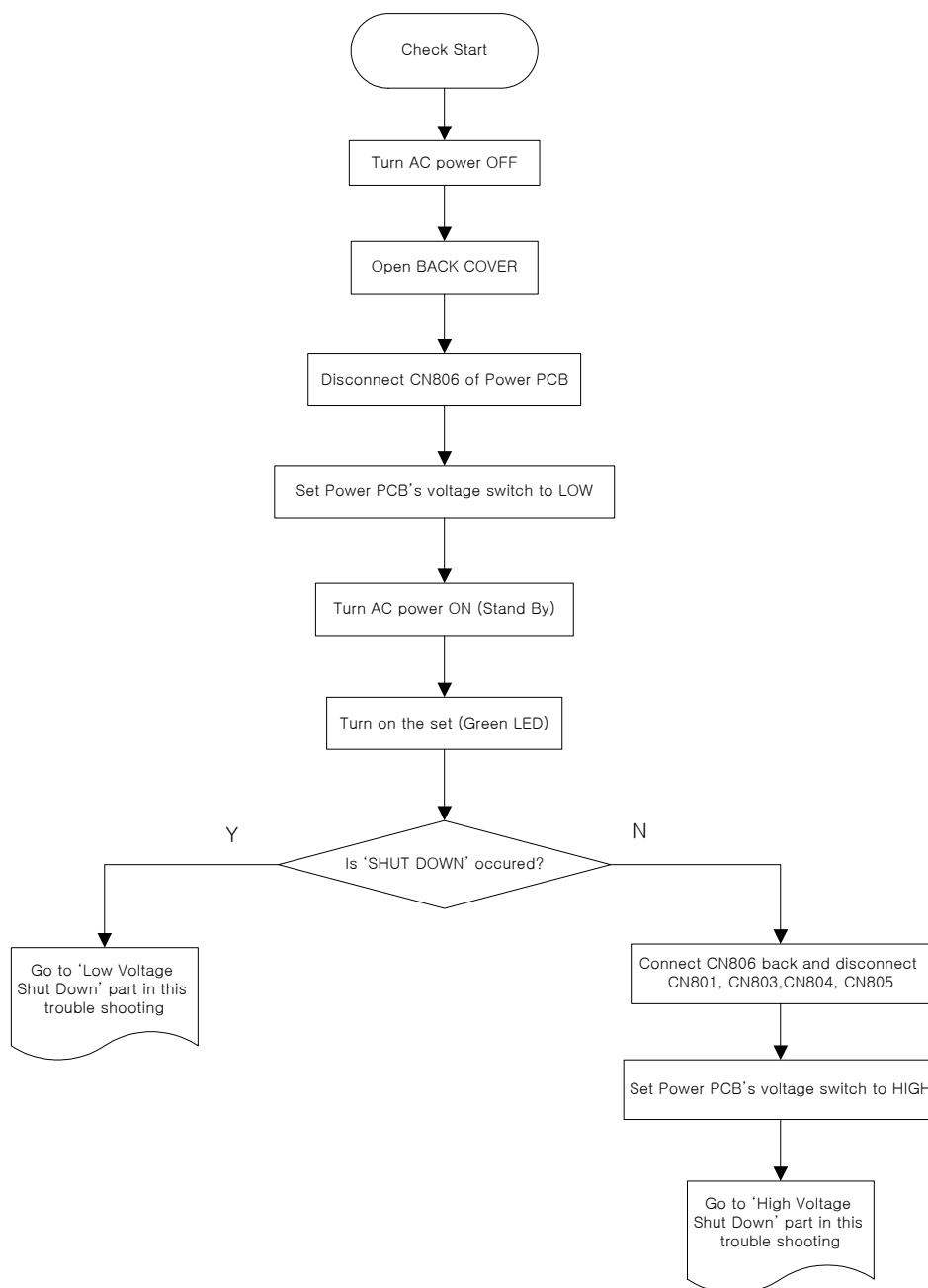
# Trouble Shooting

## 2. No Sound



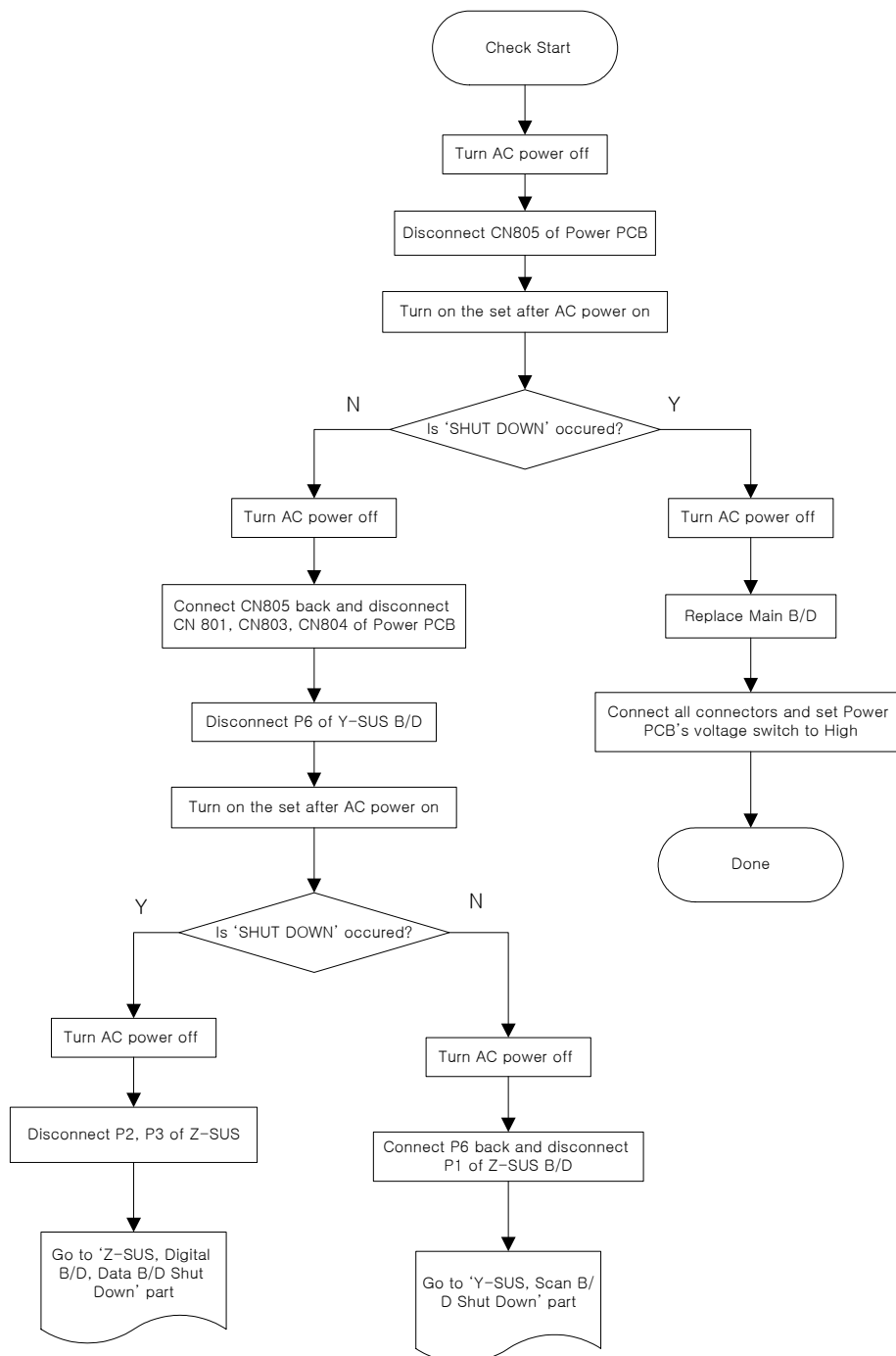
# Trouble Shooting

## 3. Shut Down



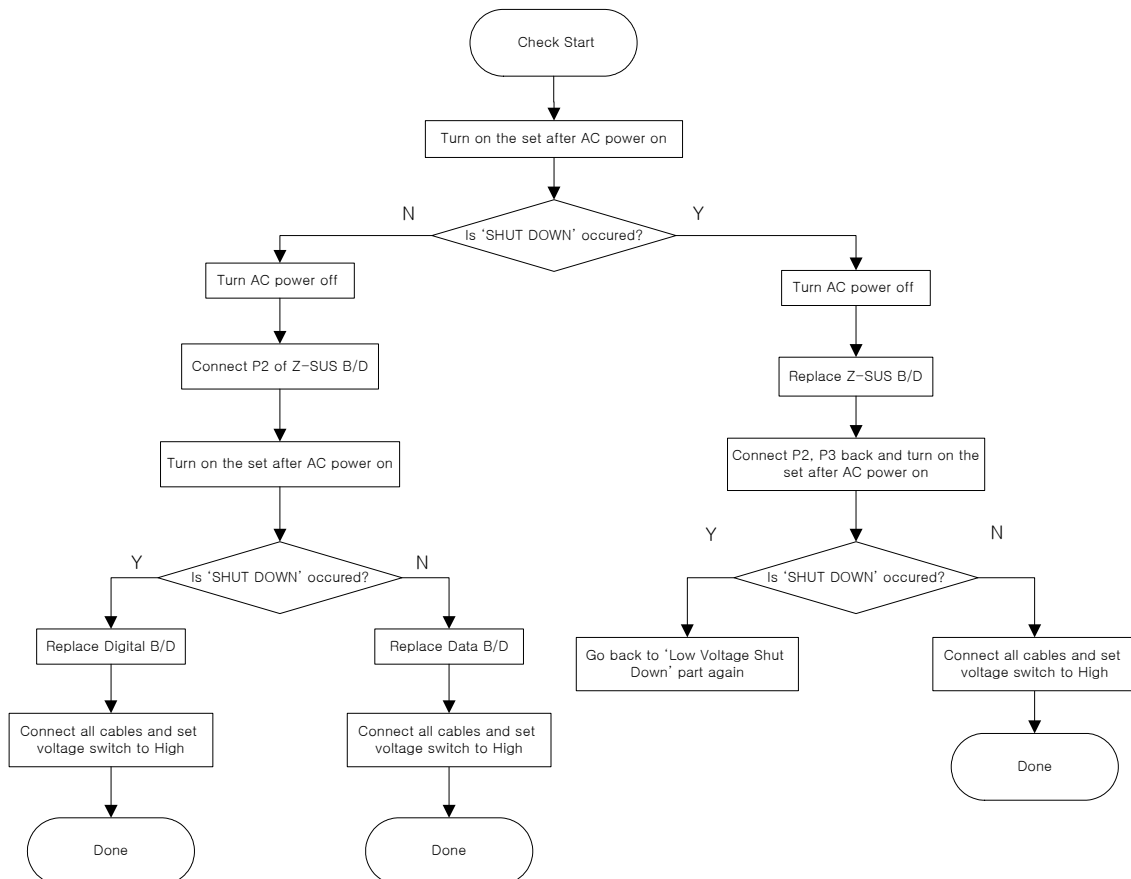
# Trouble Shooting

## A) Low Voltage Shut Down



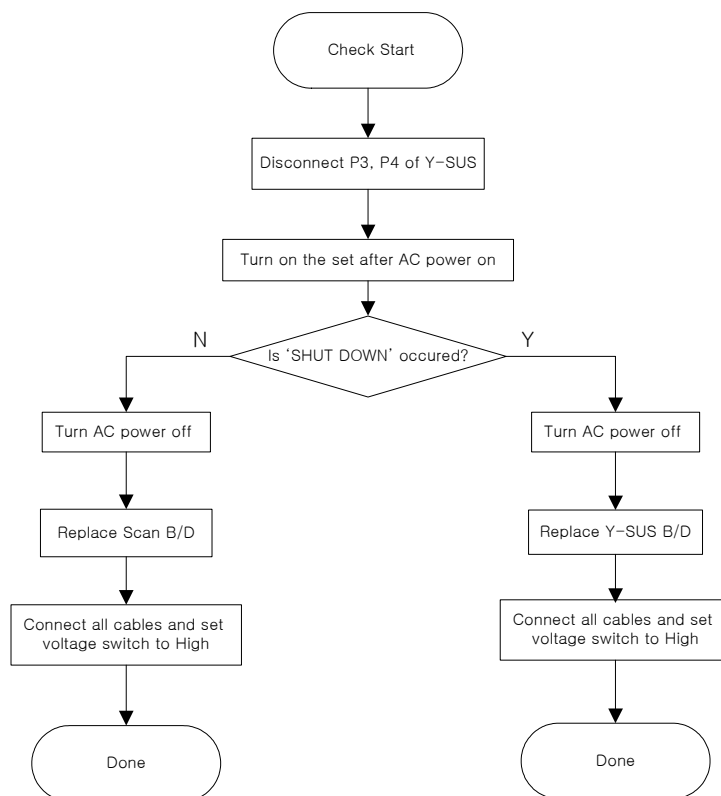
# Trouble Shooting

## B) Z-SUS, Digital B/D, Data B/D Shut Down



## Trouble Shooting

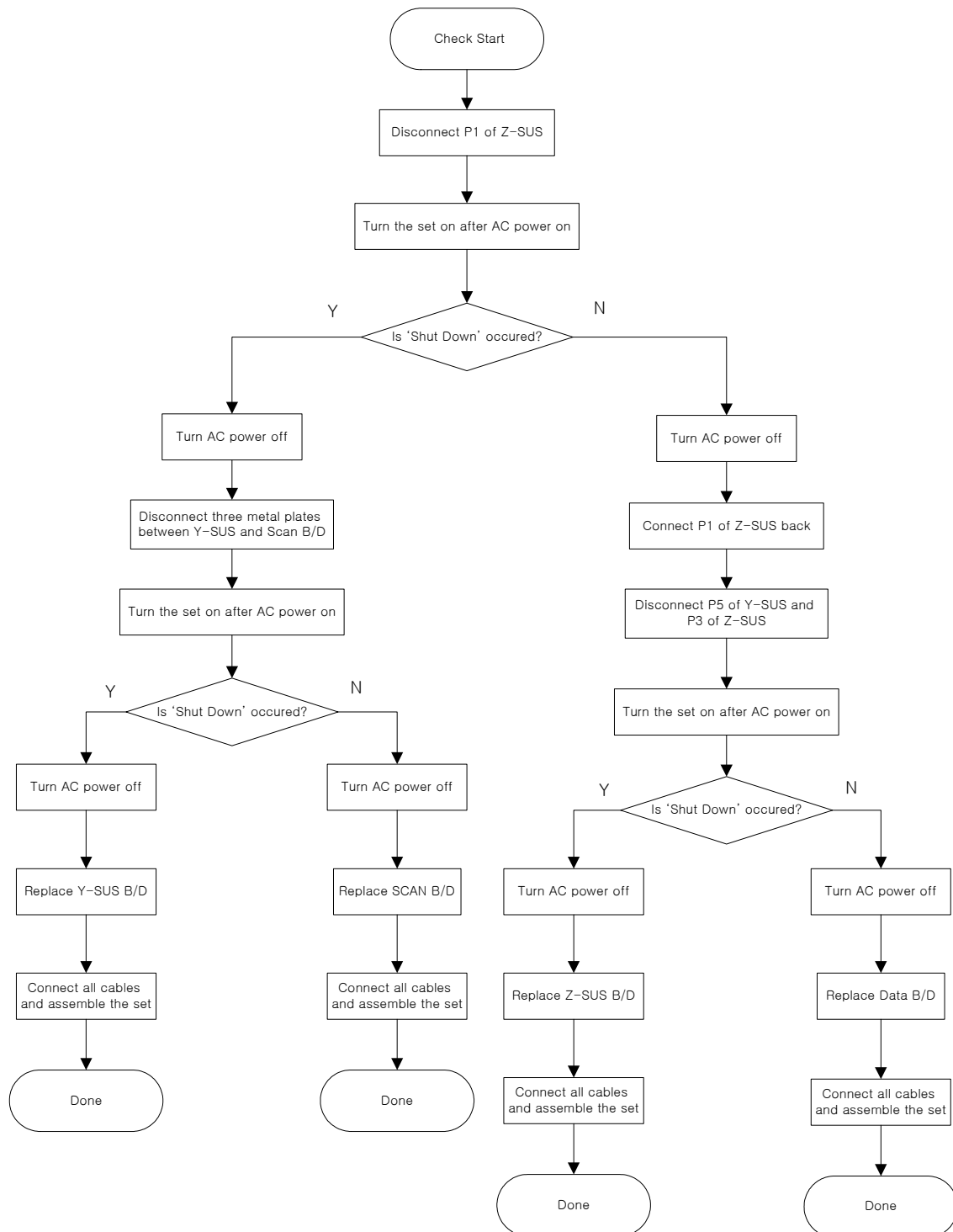
### C) Y-SUS, Scan B/D Shut Down





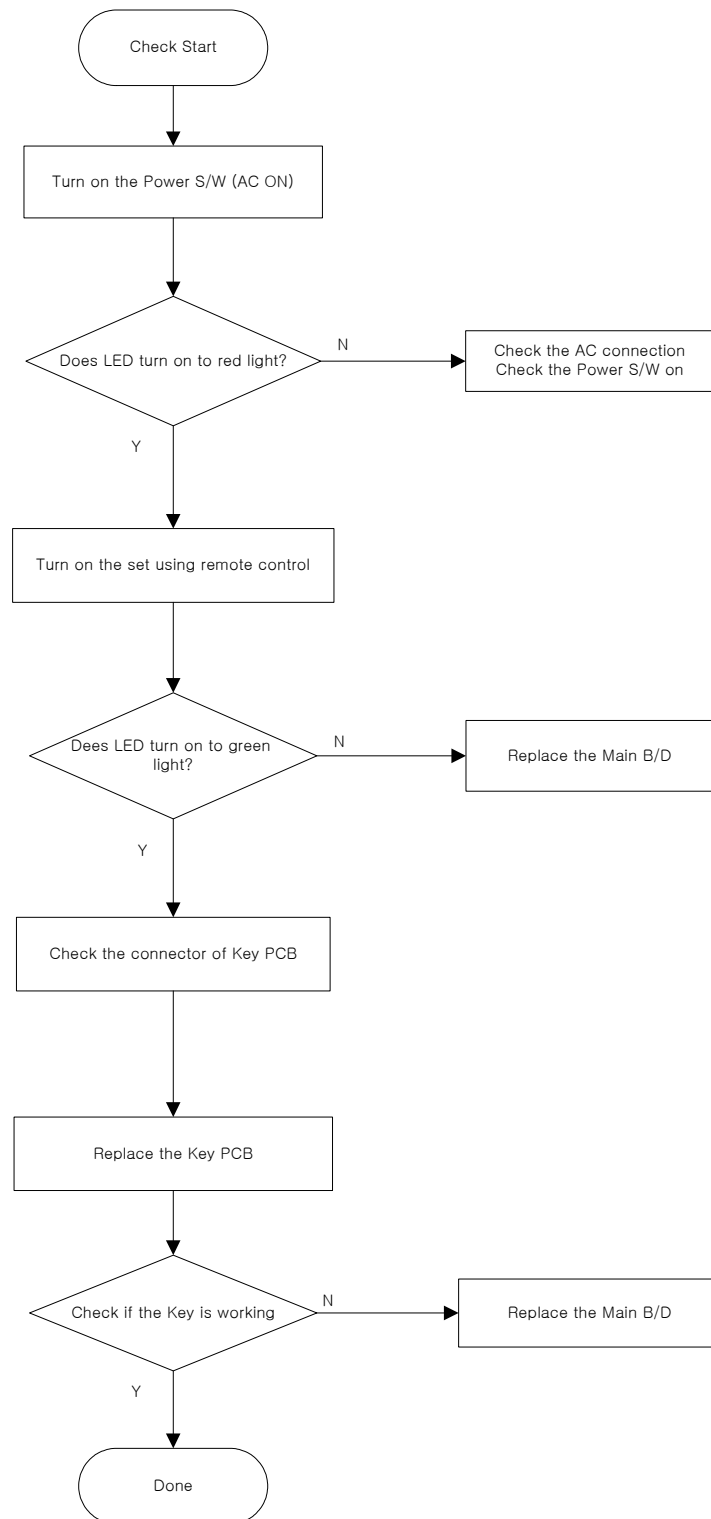
# Trouble Shooting

## D) High Voltage Shut Down



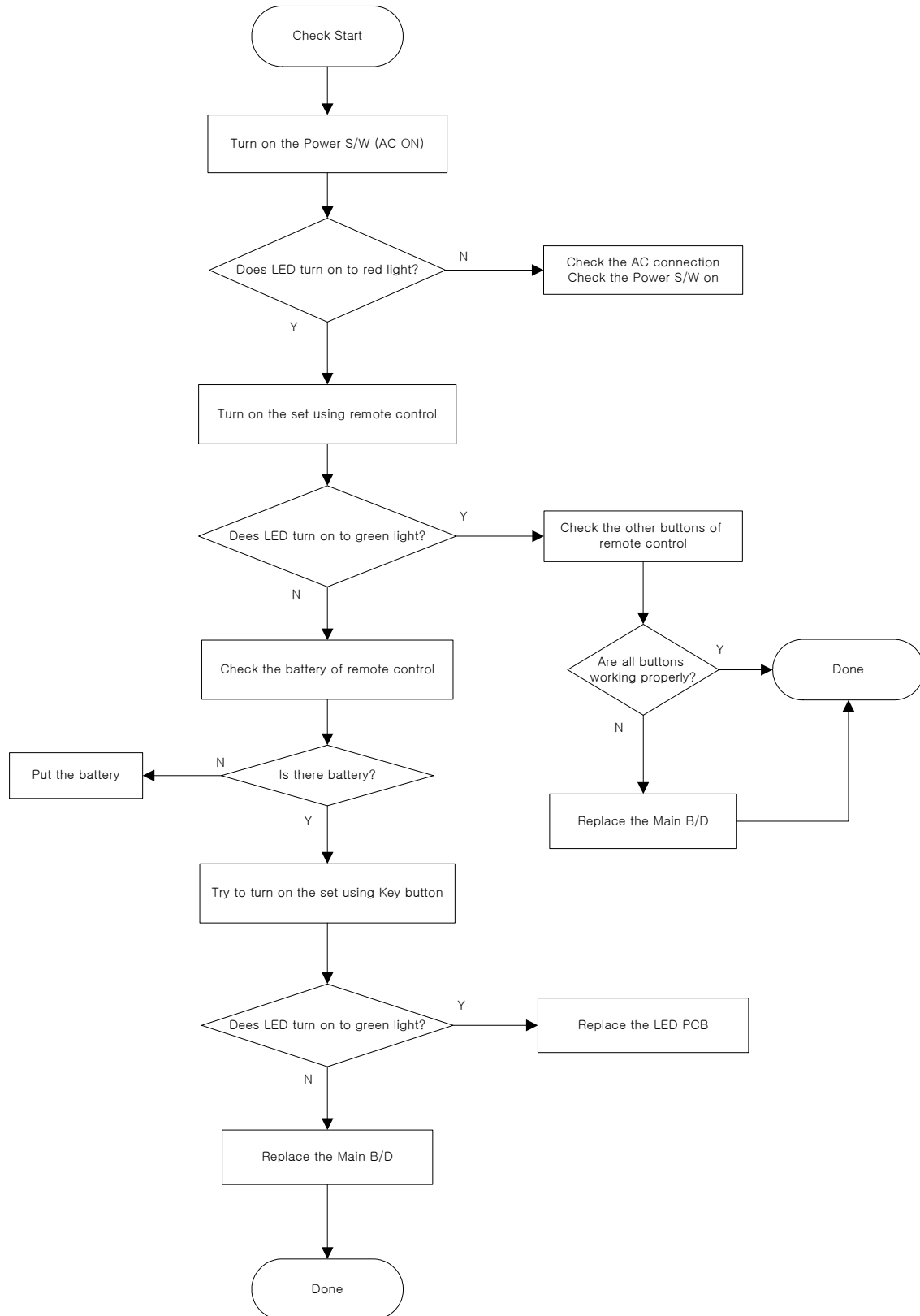
# Trouble Shooting

## 4. No Key Operation



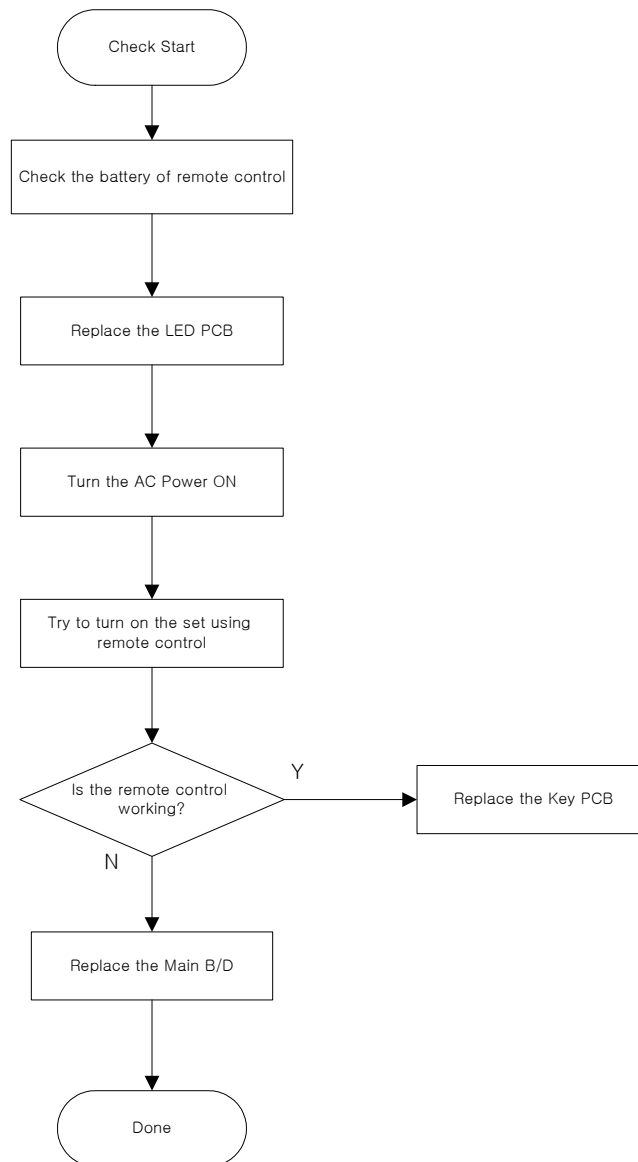
# Trouble Shooting

## 5. No Remote Control Operation



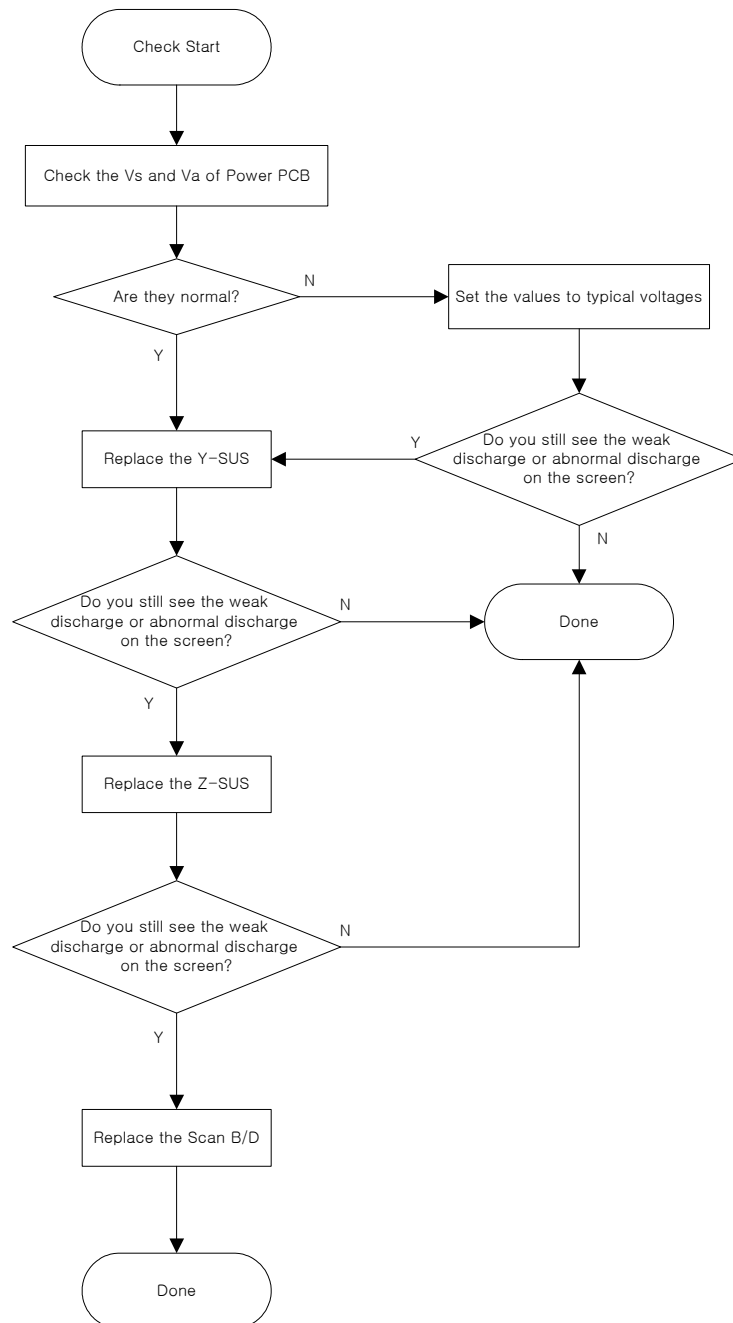
# Trouble Shooting

## 6. No Key and Remote Control Operation



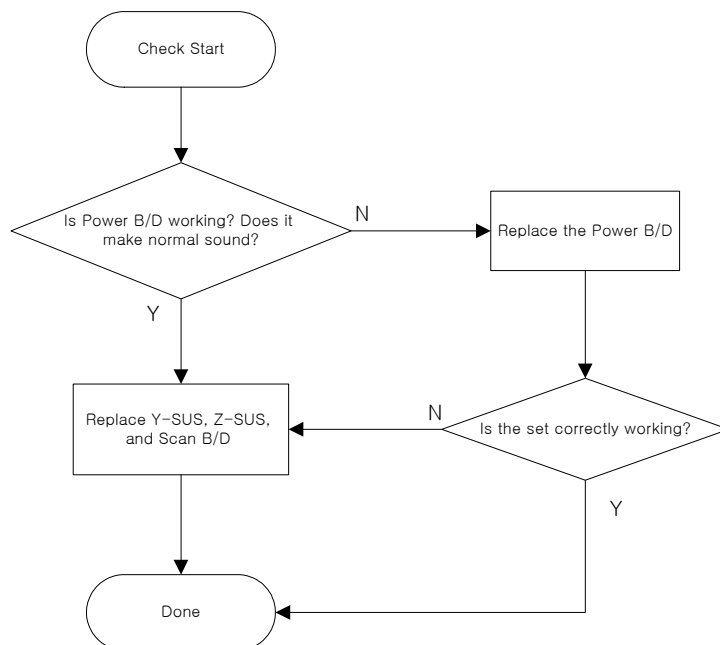
# Trouble Shooting

## 7. Weak Discharge or Abnormal Discharge

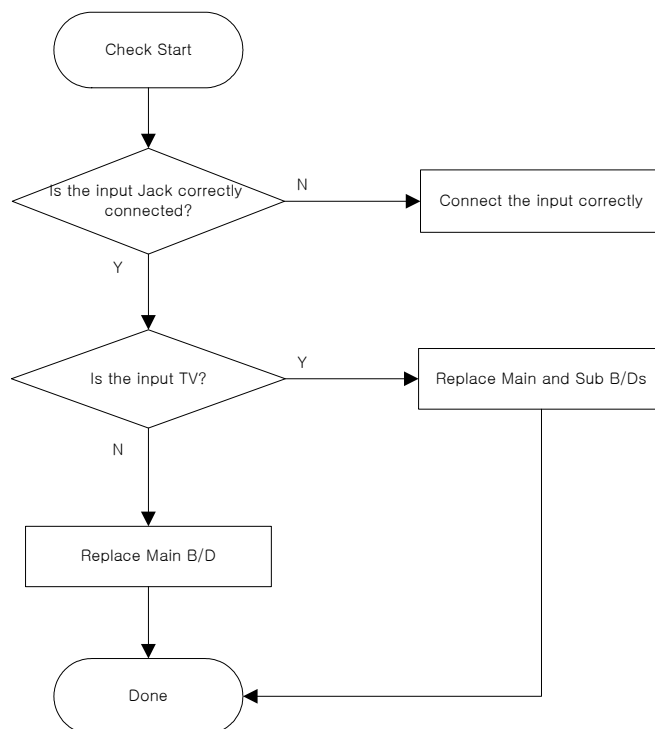


# Trouble Shooting

## 8. Not Even Weak Discharge



## 9. Particular Input Signal (Video, PC, TV, or Component) Does Not Work



# Trouble Shooting

## 10. Others

A) Set Is Making Unusual Noise

- ➔ Check the connection of Power PCB and Module. If they are OK, replace the Power PCB and check the symptom again.

B) Occasionally, the set does not operate normally. Turning off and on the AC power make the set to operate normal again

- ➔ Upgrade the software first. If you still see the same symptom, replace the Main and Sub B/D.

C) Images are abnormal

- ➔ Check the default values of service mode and user mode. If they are OK, replace the Main and Sub B/D. If they are not OK, upgrade the software and check the symptom again.

## 12. Assembly List

\* Ass'y of module is listed on the next page.

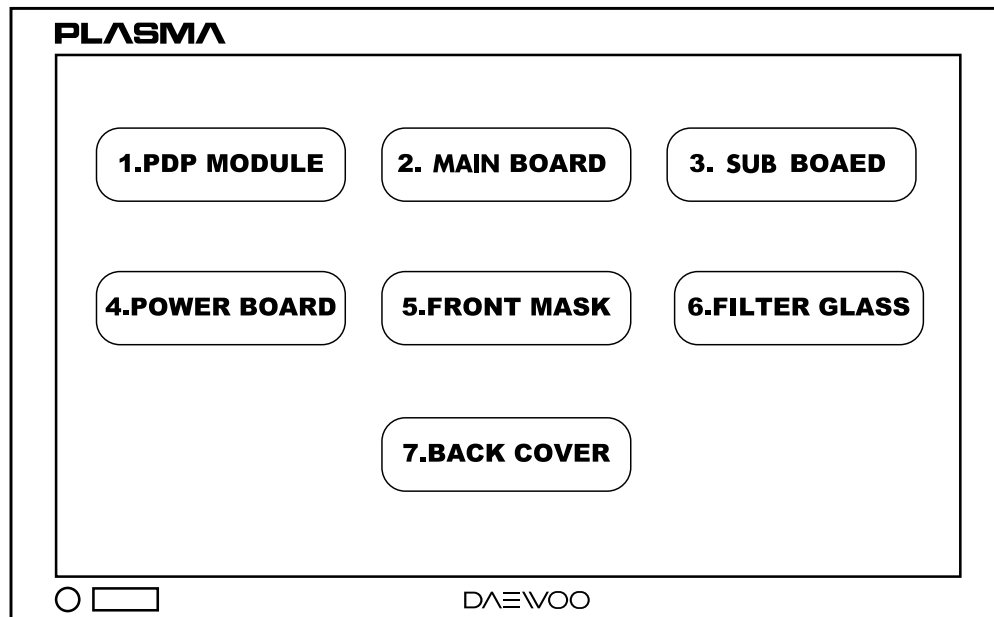
No.	PCB ASS'Y CODE	ASS'Y NAME	ASS'Y DESCRIPTION
1	4851413800	BACK COVER ASSY	21728+26162
2	4853293700	BRKT DR	ALDCS 8
3	4853220100	BRKT POWER MODULE	SECC T1.0
4	4854962100	BUTTON CH	ABS GY
5	4859004060	CABLE FFC	1.0-K-30P-50MM
6	4859004460	CABLE LVDS	1001-31FC+1001-31FC+42A1LASB=560
7	4859003750	CABLE PHONE PLUG	PLUG+CABLE 1365AWG26=150B
8	4856815900	CLAMP WIRE	EGI T0.4+TUBE+PIE 3.2
9	4856818800	CLAMP WIRE	AKKL-3140-A-RT
10	4850705N31	CONNECTOR	12505HS-05+12505TS+ULW=650
11	4850710S22	CONNECTOR	12505HS-10+12505HS-10+USW=600
12	4850706S35	CONNECTOR	YMH025-06R+YMH025-06R+ULW=200
13	4850710S21	CONNECTOR	YMH025-10+YMH025-10R+ULW=300
14	4850708S16	CONNECTOR	YMH025-08R+YMH025-08R+ULW=300
15	4850710S23	CONNECTOR	YH396-10V+YH396-10V+ULW=700
16	4850708S23	CONNECTOR	YH396-08V+YH396-08V+ULW=250
17	4850704S63	CONNECTOR	YH396-04V+YH396-04V+ULW=700
18	4850703N40	CONNECTOR	25045HP-03+25048HS-03+ULW=150
19	4850704N35	CONNECTOR	YH396-04V+YH396-05V+ULW=700
20	4850710N24	CONNECTOR	YH396-10V+YH396-09V+ULW=700
21	4850712S03	CONNECTOR	12505HS-12+12505HS-12+USW=850
22	48599DM001	CORD POWER AS	EU LP-33+LS-60=2.0M(LF)
23	485AS11290	CTRL BOARD AS	Digital BOARD
24	4855553900	DECO SENSOR	PC
25	5PZCAT3035	FILTER EMI	ZCAT3035-1330
26	5PZCA2009A	FILTER EMI	ZCAT2035-0930A
27	PTFEPWG089	FILTER EMI AS	DPP-42A1LASB
28	4853823100	FRAME HORIZONTAL	SECC T1.6
29	4851C02800	FRAME SUPPORT L AS	38232+38234
30	4851C02900	FRAME SUPPORT R AS	38233+38234
31	485A102280	GLASS FILTER	M4203-JW1245
32	4957000800	HEAT SINK	AL ANODIZHG+TAPE




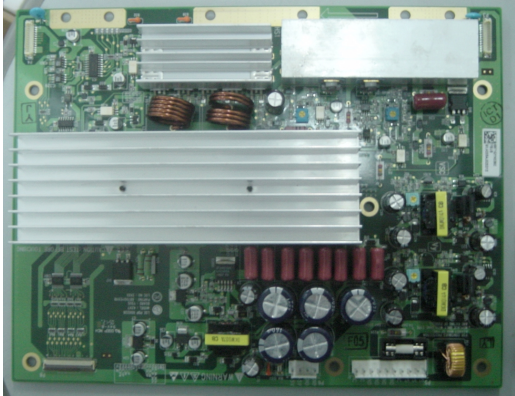

## Assembly List

33	4852090701	MASK FRONT	ABS GY
34	4850M10410	MODULE PDP	PDP42V7
35	4850M10110	MODULE POWER	1H217WA
36	PTMPMSG089	PCB MAIN MANUAL AS	DPP-42A1LASB
37	PTSBMSG089	PCB SUB MANUAL AS	DPP-42A1LASB
38	485A106070	SHIELDRON	(5 AND 3)X85X1T(ANGLE)
39	485A106270	SHIELDRON	41X53X18T
40	48A8310000	SPEAKER SYSTEM	SS-63A01
41	485A100071	TAPE EMI	CU+NI T0.13 VER1
42	485A100571	TAPE EMI	CU+NI 30X42XT0.2
43	4853633300	TERMINAL COVER	A5052 T1.0
44	4853635200	TERMINAL PLATE	A5052 T1.0
45	48B5353J17	TRANSMITTER REMOCON	R-53J17 (AAA)
46	485AS11590	X-LEFT BOARD AS	Data LEFT BOARD
47	485AS11690	X-RIGHT BOARD AS	Data RIGHT BOARD
48	485AS11490	Y-DRV BTM BOARD AS	Scan BTM BOARD
49	485AS11390	Y-DRV TOP BOARD AS	Scan TOP BOARD
50	485AS11090	Y-SUS BOARD AS	Y-SUS BOARD
51	485AS11190	Z-SUS BOARD AS	Z-SUS BOARD





## 13. STRUCTURE OF PDP SET



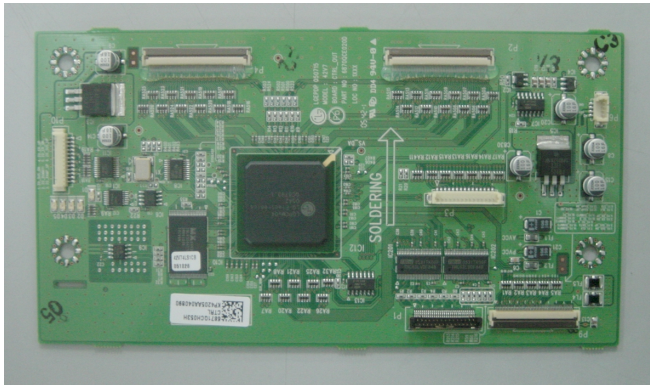


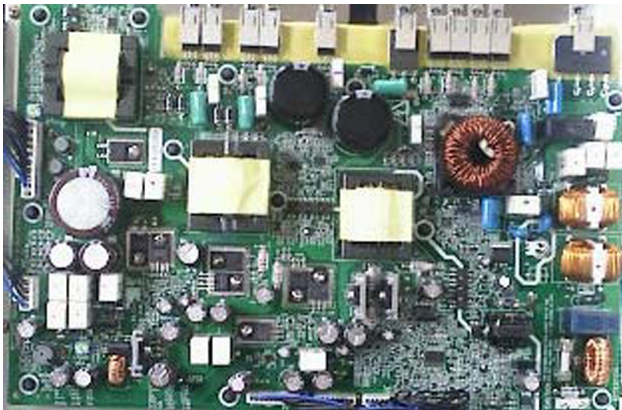
STRUCTURE OF PDP SET

COMPONENT	PICTURE	REMARK
1). PDP MODULE (With F/SUPPORT)		
1a). Y-SUS B/D		
1b). Z-SUS B/D		




## STRUCTURE OF PDP SET

COMPONENTS	PICTURE	REMARK
1d) Data Relay PKG(L)		
1e) Data Relay PKG(R)		
1f) Scan Relay PKG-T		
1g) Scan Relay PKG-B		

## STRUCTURE OF PDP SET

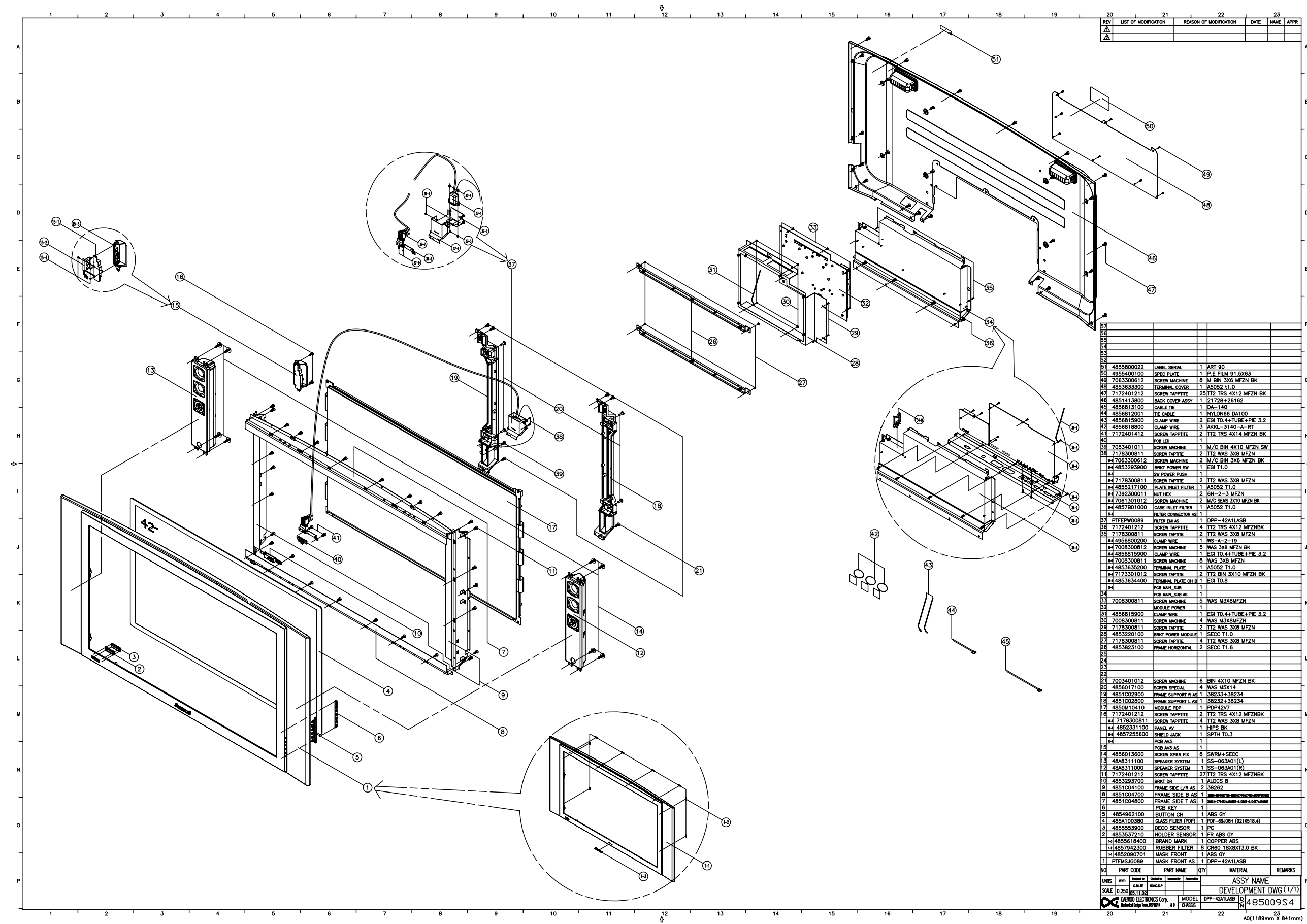
COMPONENT	PICTURE	REMARK
1h) Digital PKG		
2) MAIN BOARD		
3) SUB BOARD		
4) POWER BOARD		

## STRUCTURE OF PDP SET

COMPONENTS	PICTURE	REMARK
5) FRONT MASK		
6) FILTER GLASS		
7) BACK COVER		



14. EXPLODED VIEW



REV	LIST OF MODIFICATION	REASON OF MODIFICATION	DATE	NAME	APPR
A					
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					
O					
P					

NO	PART CODE	PART NAME	QTY	MATERIAL	REMARKS
1	4855800022	LABEL SERIAL	1	ART 90	
2	4955400100	SPEC PLATE	1	P.E FILM 91.5X63	
3	7063300612	SCREW MACHINE	8	M BIN 3X6 MFZN BK	
4	4853633300	TERMINAL COVER	1	A5052 T1.0	
5	7172401212	SCREW TAPITITE	25	TT2 TRS 4X12 MFZN BK	
6	4851413800	BACK COVER ASSY	1	21728+28162	
7	4856813100	CABLE TIE	1	DA-140	
8	4856812001	TIE CABLE	1	NYLON66 DA100	
9	4856815900	CLAMP WIRE	2	EGI TO.4+TUBE+PIE 3.2	
10	4856815800	CLAMP WIRE	3	WXL-3140-A-RT	
11	7172401412	SCREW TAPITITE	2	TT2 TRS 4X14 MFZN BK	
12	4853401011	SCREW MACHINE	1	M/C BIN 4X10 MFZN SW	
13	7178300811	SCREW TAPITITE	2	TT2 WAS 3X8 MFZN	
14	7063300612	SCREW MACHINE	2	M/C BIN 3X6 MFZN BK	
15	4853293900	BRKT POWER SW	1	EGI T1.0	
16	7178300811	SCREW TAPITITE	2	TT2 WAS 3X8 MFZN	
17	4855217100	PLATE INLET FILTER	1	A5052 T1.0	
18	7392300011	NUT HEX	2	6N-2-3 MFZN	
19	7061301012	SCREW MACHINE	2	M/C SEMS 3X10 MFZN BK	
20	4857801000	CASE INLET FILTER	1	A5052 T1.0	
21	4857801000	CASE INLET FILTER	1	A5052 T1.0	
22	4857801000	CASE INLET FILTER	1	A5052 T1.0	
23	4857801000	CASE INLET FILTER	1	A5052 T1.0	
24	4857801000	CASE INLET FILTER	1	A5052 T1.0	
25	4857801000	CASE INLET FILTER	1	A5052 T1.0	
26	4857801000	CASE INLET FILTER	1	A5052 T1.0	
27	4857801000	CASE INLET FILTER	1	A5052 T1.0	
28	4857801000	CASE INLET FILTER	1	A5052 T1.0	
29	4857801000	CASE INLET FILTER	1	A5052 T1.0	
30	4857801000	CASE INLET FILTER	1	A5052 T1.0	
31	4857801000	CASE INLET FILTER	1	A5052 T1.0	
32	4857801000	CASE INLET FILTER	1	A5052 T1.0	
33	4857801000	CASE INLET FILTER	1	A5052 T1.0	
34	4857801000	CASE INLET FILTER	1	A5052 T1.0	
35	4857801000	CASE INLET FILTER	1	A5052 T1.0	
36	4857801000	CASE INLET FILTER	1	A5052 T1.0	
37	4857801000	CASE INLET FILTER	1	A5052 T1.0	
38	4857801000	CASE INLET FILTER	1	A5052 T1.0	
39	4857801000	CASE INLET FILTER	1	A5052 T1.0	
40	4857801000	CASE INLET FILTER	1	A5052 T1.0	
41	4857801000	CASE INLET FILTER	1	A5052 T1.0	
42	4857801000	CASE INLET FILTER	1	A5052 T1.0	
43	4857801000	CASE INLET FILTER	1	A5052 T1.0	
44	4857801000	CASE INLET FILTER	1	A5052 T1.0	
45	4857801000	CASE INLET FILTER	1	A5052 T1.0	
46	4857801000	CASE INLET FILTER	1	A5052 T1.0	
47	4857801000	CASE INLET FILTER	1	A5052 T1.0	
48	4857801000	CASE INLET FILTER	1	A5052 T1.0	
49	4857801000	CASE INLET FILTER	1	A5052 T1.0	
50	4857801000	CASE INLET FILTER	1	A5052 T1.0	
51	4857801000	CASE INLET FILTER	1	A5052 T1.0	

UNITS	mm	inch	mm	inch	mm	inch
SCALE	0.250	0.010	0.010	0.010	0.010	0.010
DATE	06.11.02					
DESIGNED BY	DAEWOO ELECTRONICS Corp.					
CHECKED BY	DAEWOO ELECTRONICS Corp.					
APPROVED BY	DAEWOO ELECTRONICS Corp.					
MODEL	DPP-42A1LASB					
CHGSS	1					

ASSY NAME  
DEVELOPMENT DWG (1/1)  
485009S4  
A0(1189mm X 841mm)



**DAEWOO ELECTRONICS CORP.**

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**PRINTED DATE : Nov. 2005**





# PDP MODULE SERVICE MANUAL

**MODEL : PDP42V7####**

## **CAUTION**

1. BEFORE SERVICING THE PDP MODULE,  
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.
2. WHEN REPLACEMENT PARTS ARE REQUIRED, BE SURE TO USE  
REPLACEMENT PARTS SPECIFIED BY THE MANUFACTURER.

# **[PDP42V7#### Module]**

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## I . Safety Precautions/Technical Feature

### 1. Safety Precautions

When servicing of PDP Module, it should be not enforced into another way aside next rule, or a unaccustomed person should not repairing.

When using/handling this PDP Module, pay attention to the below warning and cautions.

#### **Warning**

Indicates a hazard that may lead to death or injury if the warning is ignored and the product is handled incorrectly.

#### **Caution**

Indicates a hazard that can lead to injury or damage to property if the caution is ignored and the product is handled incorrectly.

### 1) WARNING

- (1) Do not touch Signal and Power Connector while this product operates.  
Do not touch EMI ground part and Heat Sink of Film Filter.
- (2) Do not supply a voltage higher than that specified to this product. This may damage the product and may cause a fire.
- (3) Do not use this product in locations where the humidity is extremely high, where it may be splashed with water, or where flammable materials surround it.  
Do not install or use the product in a location that does not satisfy the specified environmental conditions. This may damage the product and may cause a fire.
- (4) If a foreign substance (such as water, metal, or liquid) gets inside the product, immediately turn off the power.  
Continuing to use the product, it may cause fire or electric shock.
- (5) If the product emits smoke, and abnormal smell, or makes an abnormal sound, immediately turn off the power.  
Continuing to use the product, it may cause fire or electric shock.
- (6) Do not disconnect or connect the connector while power to the product is on. It takes some time for the voltage to drop to a sufficiently low level after the power has been turned off.  
Confirm that the voltage has dropped to a safe level before disconnecting or connecting the connector.
- (7) Do not pull out or insert the power cable from/to an outlet with wet hands. It may cause electric shock.
- (8) Do not damage or modify the power cable. It may cause fire or electric shock.

(9) If the power cable is damaged, or if the connector is loose, do not use the product: otherwise, this can lead to fire or electric shock.

(10) If the power connector or the connector of the power cable becomes dirty or dusty, wipe it with a dry cloth. Otherwise, this can lead to fire.

(11) PDP Module uses a high voltage (Max.450V dc). Keep the cautions concerning electric shock and do not touch the Device circuitry when handling the PDP Unit. And because the capacitor of the Device circuitry may remain charged at the moment of Power OFF, standing by for 1 minute is required in order to touch the Device circuitry.

### 2) CAUTIONS

- (1) Do not place this product in a location that is subject to heavy vibration, or on an unstable surface such as an inclined surface. The product may fall off or fall over, causing injuries.
- (2) Before disconnecting cable from the product, be sure to turn off the power. Be sure to hold the connector when disconnecting cables. Pulling a cable with excessive force may cause the core of the cable to be exposed or break the cable, and this can lead to fire or electric shock.
- (3) This product should be moved by two or more persons. If one person attempts to carry this product alone, he/she may be injured.
- (4) This product contains glass. The glass may break, causing injuries, if shock, vibration, heat, or distortion is applied to the product.
- (5) The temperature of the glass of the display may rise to 80°C or more depending on the conditions of use.  
If you touch the glass inadvertently, you may be burned.
- (6) If glass surface of the display breaks or is scratched, do not touch the broken pieces or the scratches with bare hands. You may be injured.
- (7) PDP Module requires to be handled with care not to be touched with metal or hard materials, and must not be stressed by heat or mechanical impact.
- (8) There are some exposed components on the rear panel of this product. Touching these components may cause an electric shock.
- (9) When moving the product, be sure to turn off the power and disconnect all the cables. While moving the product, watch your step. The product may be dropped or all, leading to injuries of electric shock.

- (10) In order to protect static electricity due to C-MOS circuitry of the Drive part, wear a wrist band to protect static electricity when handling.
- (11) If cleaning the Panel, wipe it with a soft cloth moistened with water or a neutral detergent and squeezed, being careful not to touch the connector part of the Panel. And don't use chemical materials like thinner or benzene.
- (12) If this product is used as a display board to display a static image, "image sticking" occurs. This means that the luminance of areas of the display that remain lit for a long time drops compared with luminance of areas that are lit for a shorter time, causing uneven luminance across the display. The degree to which this occurs is in proportion to the luminance at which the display is used. To prevent this phenomenon, therefore, avoid static images as much as possible and design your system so that it is used at a low luminance, by reducing signal level difference between bright area and less bright area through signal processing.
- (13) Because PDP Module emits heat from the Glass Panel part and the Drive circuitry, the environmental temperature must not be over 40°C.  
The temperature of the Glass Panel part is especially high owing to heat from internal Drive circuitry. And because the PDP Module is driven by high voltage, it must avoid conductive materials.
- (14) If inserting components or circuit board in order to repair, be sure to fix a lead line to the connector before soldering.
- (15) If inserting high-power resistor(metal-oxide film resistor or metal film resistor) in order to repair, insert it as 10mm away as from a board.
- (16) During repairs, high voltage or high temperature components must be put away from a lead line.
- (17) This is a Cold Chassis but you had better use a cold transformer for safety during repairs. If repairing electricity source part, you must use the cold transformer.
- (18) Do not place an object on the glass surface of the display. The glass may break or be scratched.
- (19) This product may be damaged if it is subject to excessive stresses (such as excessive voltage, current, or temperature). The absolute maximum ratings specify the limits of these stresses.
- (20) The recommended operating conditions are conditions in which the normal operation of this product is guaranteed. All the rated values of the electrical specifications are guaranteed within these conditions.  
Always use the product within the range of the recommended operating conditions. Otherwise, the reliability of the product may be degraded.
- (21) This product has a glass display surface. Design your system so that excessive shock and load are not applied to the glass. Exercise care that the vent at the corner of the glass panel is not damaged.  
If the glass panel or vent is damaged, the product is inoperable.
- (22) Do not cover or wrap the product with a cloth or other covering while power is supplied to the product.
- (23) Before turning on power to the product, check the wiring of the product and confirm that the supply voltage is within the rated voltage range. If the wiring is wrong or if a voltage outside the rated range is applied, the product may malfunction or be damaged.
- (24) Do not store this product in a location where temperature and humidity are high. This may cause the product to malfunction. Because this product uses a discharge phenomenon, it may take time to light (operation may be delayed) when the product is used after it has been stored for a long time. In this case, it is recommended to light all cells for about 2 hours (aging).
- (25) This product is made from various materials such as glass, metal, and plastic. When discarding it, be sure to contact a professional waste disposal operator.
- (26) If faults occur due to arbitrary modification or disassembly, LG Electronics is not responsible for function, quality or other items.
- (27) Use of the product with a combination of parameters, conditions, or logic not specified in the specifications of this product is not guaranteed. If intending to use the product in such a way, be sure to consult LGE in advance.
- (28) Within the warranty period, general faults that occur due to defects in components such as ICs will be rectified by LGE without charge. However, IMAGE STICKING due to misapplying the above (12) provision is not included in the warranty. Repairs due to the other faults may be charged for depending on responsibility for the faults.
- (29) In assembling Module into SET, in case Film Filter and as a protective film is bared, static electricity of exfoliated protective film which is bared from beginning X-Board down ward getting TCP to no getting TCP should not influence on TCP.  
Also Filter after protective film is bared or in the storage can be charged with electricity, so the EMI ground part of Film Filter should be used after Grounding.

2. Technical Feature

PDP Module is a display device to be divided into a Panel part and a Drive part. The Panel part consists of Electrodes, Phosphor, various dielectrics and gas, and the Drive part includes electronic circuitry and PCB. PDP42V7#### model produced in the LG electronic is 42inches color Plasma display module of WVGA(852(H)x480(V)), and it is a display device giving concrete to bright image by using AC Plasma technology of LG electronic.

1) General Specification

- (1) Model Name

(2) Number of Pixel

(3) Pixel Pitch

(4) Cell Pitch

(5) Display area

(6) Outline dimension

(7) Color arrangement

(8) Number of COLRO

(9) Weight

(10) Aspect Ratio

(11) Peak Brightness

(12) Contrast Ratio

(13) POWER CONSUMPTION

(14) Lifetime
- : PDP42V7####

: 852(H) x 480(V) (1pixel=3 RGB cells)

: 1080μm(H) x 1080μm(V)

: 320μm(H) x 1080μm(V) (Base: Green Cell)

: 920.1(H) x 518.4(V) ±0.5mm

: 1005(H) x 597(V)x 60.6(D) ±1mm

: RGB Closed type

: (R)1024 x (G)1024 x (B)1024

: 14.7Kg ±0.5Kg

: 100Kg ±5Kg(5EA/1BOX)

: 16:9

: Typical 1500dc/nf(1/10 White Window)

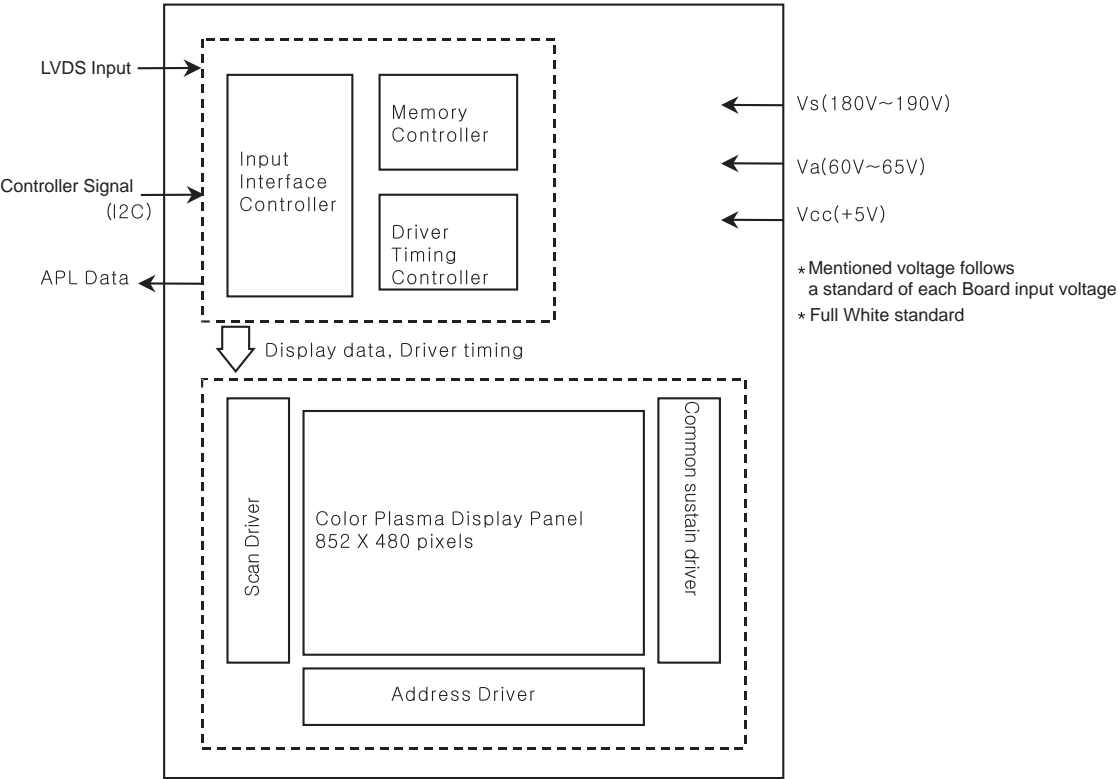
: Avergae 100:1(Light room 100 Lx at center)

: Typical 10000:1(Dark room 1/10 White Window  
(White Window Pattern at Center)

: Typical 200 W(Full White) \* Note 1)

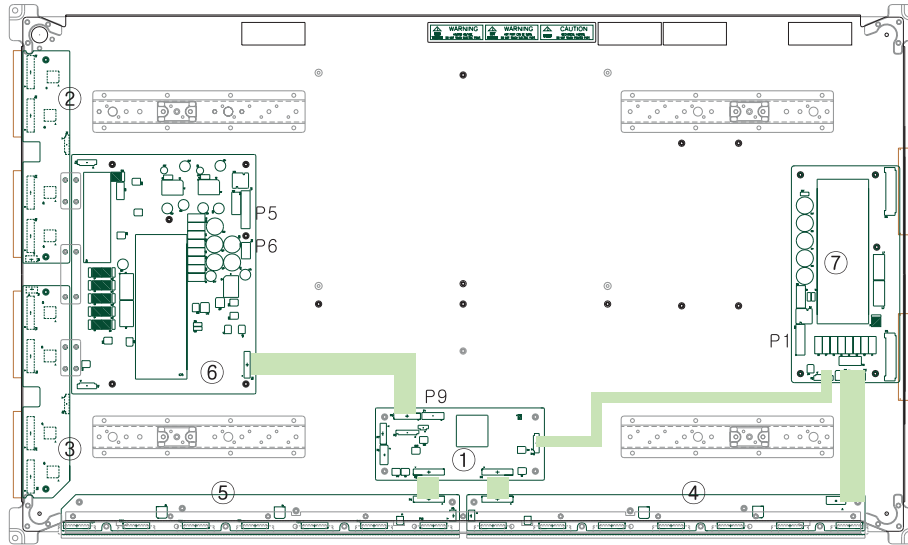
: Over 60,000 Hrs (Initial brightness 1/2)

2) Block Diagram



\* Note 1) It can be changed maximum 300W according to input image.

## II . Formation and Specification of Module



No	Connector	Input Voltage & Signal
1	P1[Z SUS B/D]	5V, Va, Vs
2	P5[Y SUS B/D]	Vs
3	P6[Y SUS B/D]	5V
4	P9[CTRL B/D]	Control Signal

No	Part No.		Description
①	6871QCH053A	PWB(PCB) ASS'Y	LVDS CTRL B/D ASS'Y
	6871QCH073A	PWB(PCB) ASS'Y	HITACHI COPPER LVDS CTRL B/D ASS'Y
	6871QCH053B	PWB(PCB) ASS'Y	LVDS OUTER SIDE CTRL B/D ASS'Y
	6871QCH053C	PWB(PCB) ASS'Y	PB-FREE FFC & CON LVDS OUTER SIDE CTRL B/D ASS'Y
②	6871QDH084A	PWB(PCB) ASS'Y	YDRV TOP B/D ASS'Y
	6871QDH105A	PWB(PCB) ASS'Y	HITACHI COPPER YDRV TOP B/D ASS'Y
③	6871QDH085A	PWB(PCB) ASS'Y	YDRV BTM B/D ASS'Y
	6871QDH106A	PWB(PCB) ASS'Y	HITACHI COPPER YDRV BTM B/D ASS'Y
④	6871QRH055A	PWB(PCB) ASS'Y	XR B/D ASS'Y
	6871QRH055B	PWB(PCB) ASS'Y	PB-FREE FFC & CON XR B/D ASS'Y
	6871QRH066A	PWB(PCB) ASS'Y	HITACHI COPPER XR B/D ASS'Y
⑤	6871QLH047A	PWB(PCB) ASS'Y	XL B/D ASS'Y
	6871QLH047B	PWB(PCB) ASS'Y	PB-FREE FFC & CON XL B/D ASS'Y
	6871QLH056A	PWB(PCB) ASS'Y	HITACHI COPPER XL B/D ASS'Y
⑥	6871QYH036A	PWB(PCB) ASS'Y	YSUS B/D ASS'Y
	6871QYH036B	PWB(PCB) ASS'Y	PB-FREE FFC & CON YSUS B/D ASS'Y
	6871QYH050A	PWB(PCB) ASS'Y	HITACHI COPPER YSUS B/D ASS'Y
⑦	6871QZH041A	PWB(PCB) ASS'Y	ZSUS B/D ASS'Y
	6871QZH052A	PWB(PCB) ASS'Y	HITACHI COPPER ZSUS B/D ASS'Y

※ The composition and specification of Initial production module  
Revision information refers to 'VII Revision for Boards, Components and ROM DATA'

## III . Adjustment

### 1. Application Object

This standard is applied to the PDP42V7#### PDP Module which is manufactured by the manufacturing team of PDP promotion department or elsewhere.

### 2. Notes

- (1) Without any special specification, the Module should be at the condition of preliminaries more than 10minutes before adjusting.
  - Service signal : 100% Full White signal
  - Service DC voltage : Vcc: 5V, Va: 65V, Vs: 187V
  - DC/DC Pack voltage : Vsc=115V  
-Vy: -85V
  - Preliminaries environment : Temp (25±5°C), Relative humidity (65±10%)
- (2) Module should get the Aging for the equilibrium after finish the assembling. Aging condition is shown below.
  - Service signal: 100% Full White, Red, Green, Blue pattern signal(Service time of each pattern : within 5minutes/cycle)
  - Service DC voltage : Match the voltage with the set up voltage in the first adjustment.
  - Aging time : More than 30 minutes
  - Aging environment : Temp (25±2°C), Relative humidity- Less than 65%
- (3) Module adjustment should be followed by below sequence.
  - Setting up the Vsc/-Vy voltage(Vsc=115V, -Vy=-85V)
  - Adjusting the voltage wave form(Refer to adjustment)
  - 25±5°C, 65±10%
- (4) Without any special specification, you should adjust the Module in the environment of Temp (25±5°C) and Relative humidity (65±10%)

**Caution)** If you let the still image more than 10 minutes(especially The Digital pattern or Cross Hatch Pattern which has clear gradation), after image can be presented in the black level part of screen.

## 3. Adjustment after Assembling

### 3-1. Using Tools

- (1) Digital oscilloscope : More than 200MHz
- (2) DVM(Digital Multimeter) : Fluke 87 or similar one
- (3) Signal generator : VG-825 or similar one
- (4) DC power supply or PSU
  - DC power supply for Vs (1) : Should be changeable between 0V to 200V/ more than 10A
  - DC power supply for Va (1) : Should be changeable between 0V to 100V/ more than 5A
  - DC power supply for 5V (1) : Should be changeable between 0V to 10V/ more than 10A
  - DC-DC Converter Jig (1) : The Jig which has equivalent voltage output of PDP42V7#### Module after taking the Vs, Va, 5V voltage
  - Voltage stability of power supply : Within ±1% for Vs/Va, within ±3% for 5V

### 3-2. Connection diagram of measuring instrument and setting up the initial voltage

- (1) For connection diagram of measuring instrument, refer to Fig. 1.(Connection diagram of measuring instrument that adjusting the voltage wave form)
- (2) Setting up the initial voltage(Voltage Label)  
Vcc: 5V, Va: 65V, Vs: 187V  
But, Initially setting up voltage can be changed by the set up range according to the Module's characteristic.

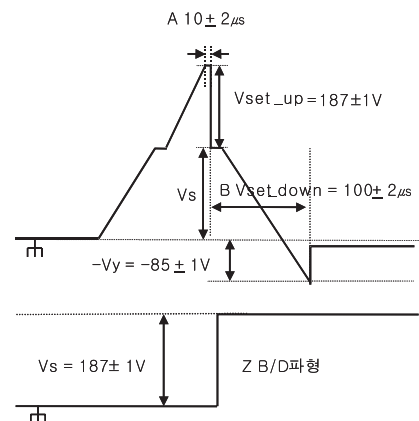
### 3-3. How to Adjust

#### (1) Adjusting Vset-up Voltage Wave form

- ① Connect the measuring instrument to be (Fig. 1).
- ② Turn on the measuring instrument with Caution of (Fig. 1).
- ③ Connect the oscilloscope probe to B39(Bead) of Y B/D bottom and GND.
- ④ Turn the VR1 of Y B/D and make the "A" waveform Fig. 2 to be 10±2μs.

#### (2) Adjusting Vset-down Voltage Wave form

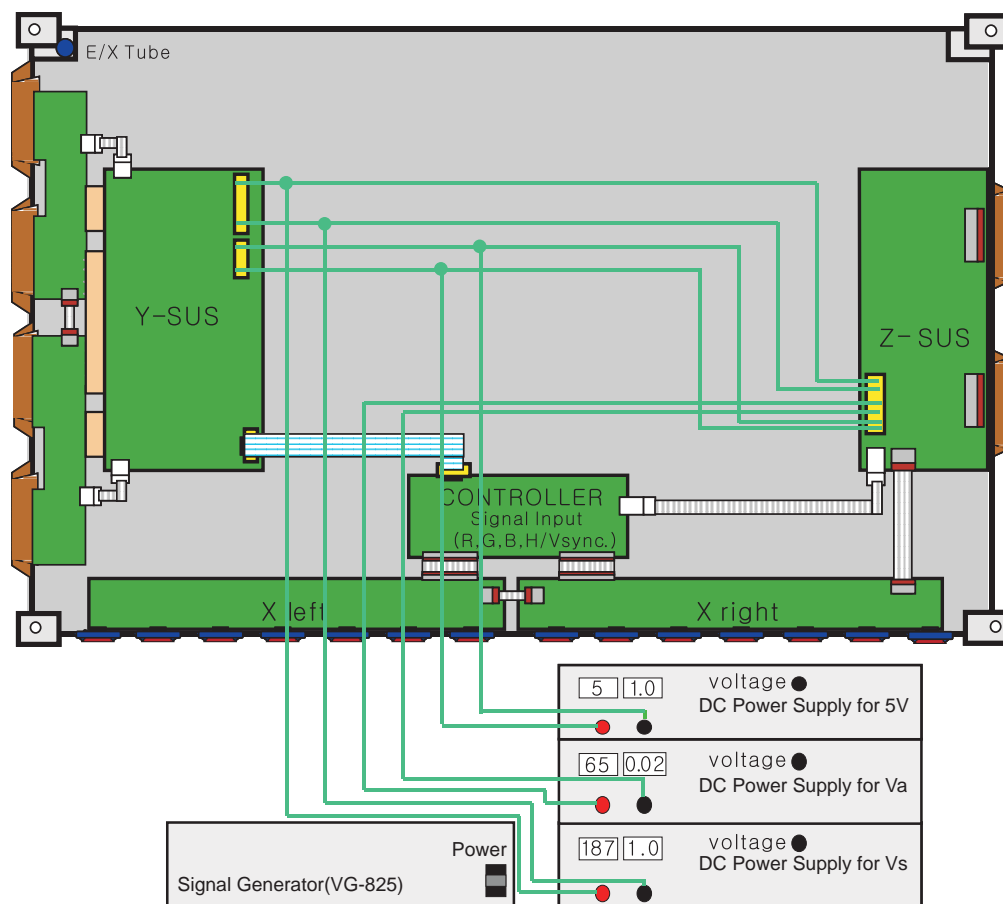
- ① Turn the VR2 of YSUS B/D and make the "B" waveform Fig. 2 to be 100±2μs.



(Fig. 2) Y, Z set-up Waveform

#### (3) Checking the DC/DC pack voltage

- ① Convert the signal of signal generator to the 100% Full White signal.
- ② Connect the GND terminal of DVM to the right leg of R53 on the Y B/D and set the Plus terminal to the left leg of R53 to check the Vsc voltage(115±1V) and when there is abnormality in voltage turn the variable resistor(VR3) of DC/DC Pack(Vsc) PS1 on Y B/D to adjust.
- ③ Connect the GND terminal of DVM to the right leg of R78 on the Y B/D and set the Plus terminal to the left leg of R78 to check the -Vy voltage(-85±1V) and when there is abnormality in voltage turn the variable resistor(VR4) of DC/DC Pack(-Vy) PS1 on Y B/D to adjust.



- <Caution>**
- (1) The power of the signal generator should be turned on before turning on the power of DC power supply.
  - (2) The voltage of DC power supply, in standard of Module input voltage, should be preset as below.  
Vcc: 5V, Va: 65V, Vs: 187V
  - (3) The power of power supply must turned on by this sequence. Reverse direction When turning off.  
\* Module on : 5V  $\Rightarrow$  Va  $\Rightarrow$  Vs, Module off: Vs  $\Rightarrow$  Va  $\Rightarrow$  5V
  - (4) Signal generator should be selected with 852\*480(WVGA) mode.

※ Also the PSU(Power Supply Unit) use is possible

(Fig. 1) Connection diagram of measuring instrument

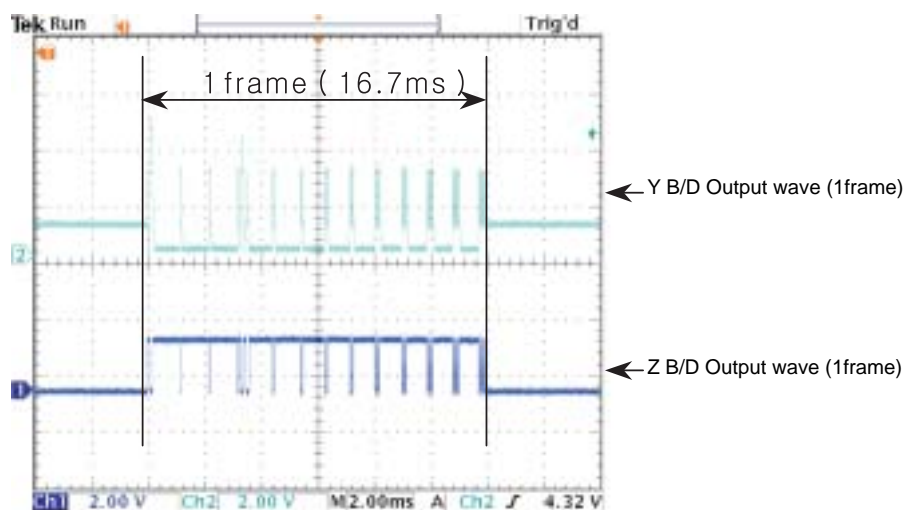


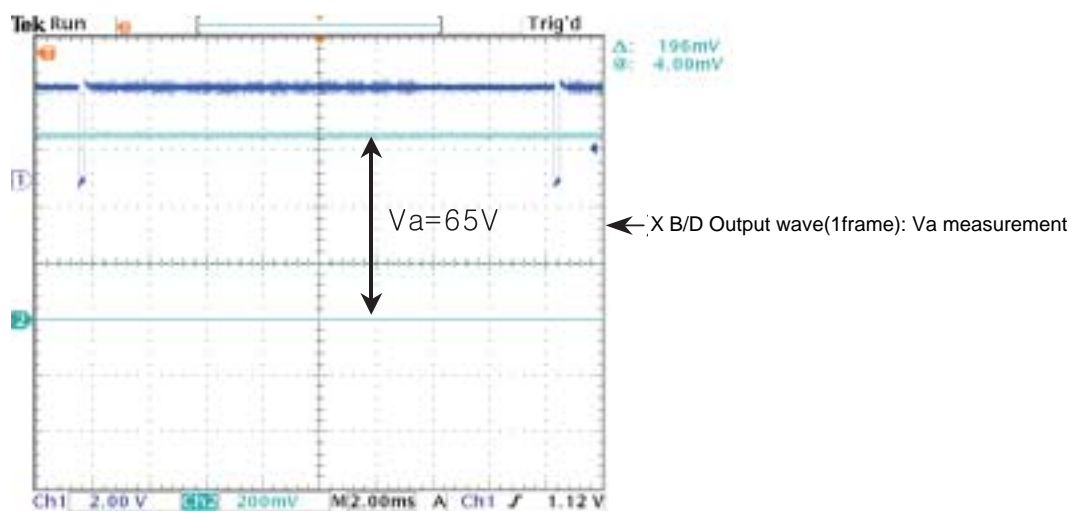
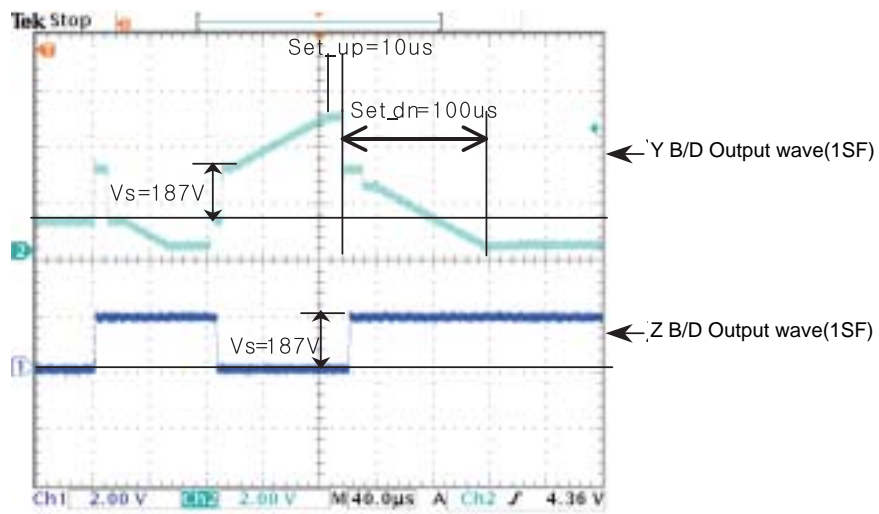
## IV . Trouble Shooting

### 1. Checking for no Picture

A screen doesn't display at all and condition of black pattern or power off.

- (1) Check whether the CTRL B/D LED(D1, D2, D3, D4, D5) is turned on or not.
- (2) Check the power and signal cable of CTRL B/D.
- (3) X B/D, Y B/D, Z B/D is well plugged in.
- (4) Check the connection of X B/D, Y B/D and Z B/D to CTRL B/D.
- (5) Measure the output wave of X, Y, Z B/D with oscilloscope(more than 200MHz)  
and find the trouble of B/D by comparing the output wave with below figure.
  - Measure Point fo Y B/D : Bead B39
  - Measure Point fo Z B/D : Bead B28
  - Measure Point fo X B/D : P3
- (6) Check the SCAN(Y side) IC
- (7) Check the DATA(X side) TCP IC
- (8) Replace the CTRL B/D.
- (9) Check the Fuse of Y, Z B/D is open and replace when open.
- (10) Check the input voltage. ( $V_{cc}=5V/V_a=65V/V_s=187V$ )





## 2. Hitch Diagnosis Following Display Condition

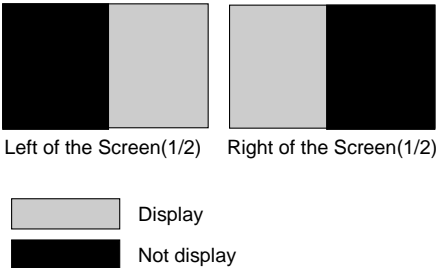
### 2-1. All or 1/2 of the screen doesn't be shown

- (1) In case of all of the screen doesn't be shown, Confirm the 8pin connection of X B/D to Z B/D is well plugged in which is correspond
- (2) In case of 1/2 of the screen doesn't be shown
  - ① XR B/D
    - Confirm the 60pin connection of CTRL B/D to XR B/D is well plugged in which is correspond
  - ② XL B/D
    - Confirm the 5pin connection of XR B/D to XL B/D is well plugged in which is correspond
    - Confirm the 60pin connection of CTRL B/D to XL B/D is well plugged in which is correspond
- (3) Replace relevant X B/D.

#### \* Relationship between screen and X B/D

Screen		X B/D
Left of the Screen 1/2	<-->	Right X B/D
Right of the Screen 1/2	<-->	Left X B/D

#### \* Screen Display Form



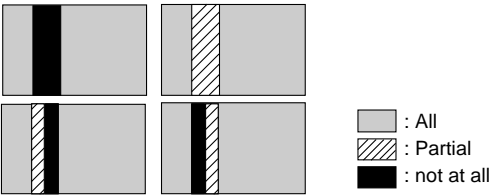
#### \* 1/4 of the screen doesn't be shown Equality with 2-1

### 2-2. The screen doesn't be shown as Data TCP

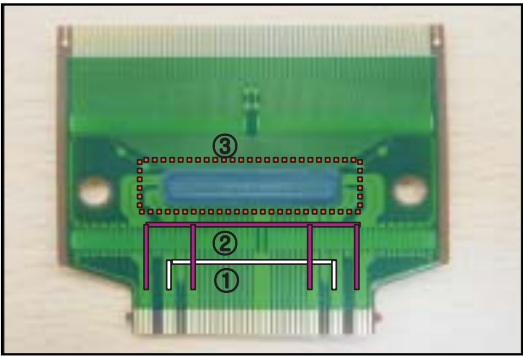
- (Include not be shown part of DataTCP quantity or a part)
- (1) The problem between Data TCP and X B/D is more possible that the screen is not be shown as data TCP.
  - (2) Confirm the connector of Data TCP is well connected to X B/D. Correspond to the part that screen is not showing
  - (3) Confirm whether the Data TCP is failed.  
(Inclusion examination with the naked eye(IC Burnt and others)
    - ① IC is Fail: Replace the Module
    - ② In case of shorting the X B/D by foreign or PCB pattern is open: When TCP IC is not Fail, replace the X B/D.

#### \* Example of the screen display form

(Anything of the 14 Data TCP can be shown beside below pictures)



#### \* How to examine Data TCP IC



- Change '①(Va Power)' into CATHOD, '②(GND)' into ANODE and then examine the Diode to the forward or reverse direction.
- Burnt of '③(IC)' and others examine with the naked eye.

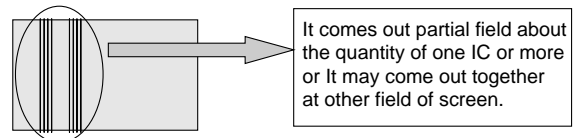
### 2-3. It Generates Unusual Pattern of Data TCP IC unit

- (1) In case of generating unusual pattern of Data TCP IC unit as below picture, there is problem in the Signal(CLK, data, STB) or connector that is input into Data TCP IC
- (2) In case of <case 1>
  - Confirm the connection of Data TCP connector and IC Fail.
  - Replace the relevant X B/D.
- (3) In case of <case 2>, <case 3>
  - Confirm the connection of Data TCP connector and connector that is connected from CTRL to X B/D.
  - Check the foreign on the CTRL B/D and X B/D.
  - Replace the relevant X B/D or CTRL B/D.
- (4) In case of <case 4>, <case 5>
  - Confirm the connector that is connected from CTRL to X B/D
  - Replace relevant X B/D or CTRL B/D
  - Confirm the connection of Z B/D and XR B/D(8pin), XR B/D and XL B/D(5pin) power connector.

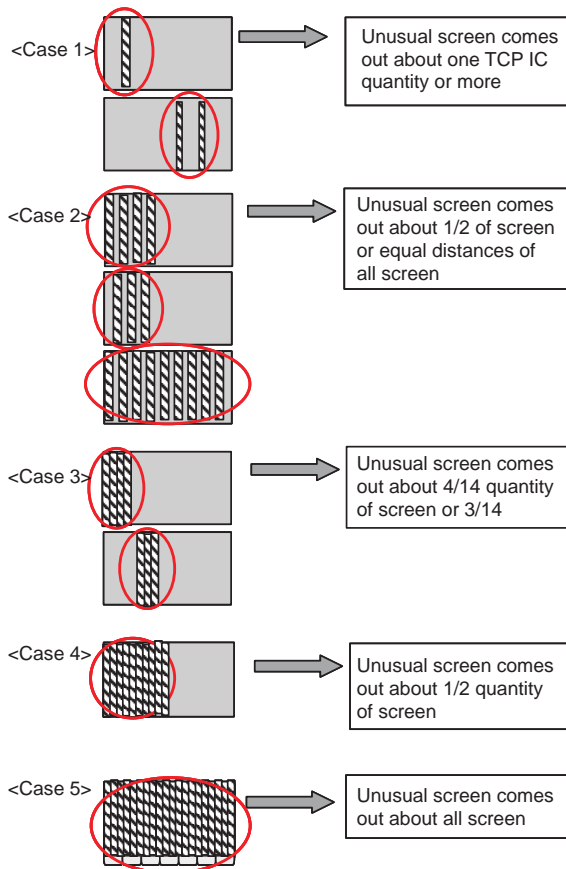
### 2-4. Regular Stripe is Generated about the Quantity of one Data TCP IC or more

- (1) In case of generating regular stripe about the quantity of one Data TCP IC or more, check the connection of connector or foreign.
- (2) Confirm the connection connector/foreign of XB/D or CTRL B/D to X B/D correspond to unusual screen.
- (3) Replace relevant XB/D or CTRL B/D.

#### \* Screen Display Form



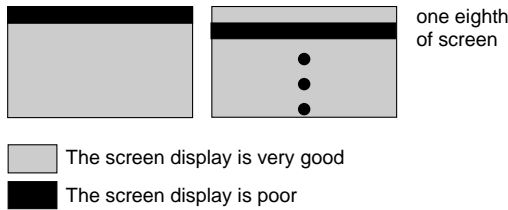
#### \* Screen Display Form



### 2-5. The screen display has a problem for Scan FPC.

- (1) It's may be a problem between Scan FPC and Y DRV B/D.
- (2) Check the connection of Y DRV B/D and Scan FPC.
- (3) If the Scan IC is failed, replace the Y DRV B/D.

#### \* Screen Display Form



#### \* Check a method of SCAN IC

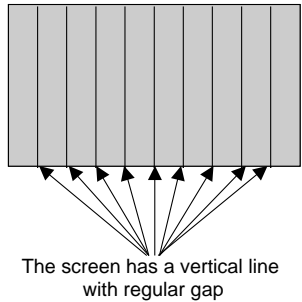


Change the Vpp Pin into ANODE and GND Pin into CATHOD and then test the Diode with forward or reverse direction.

### 2-6. The screen has a vertical line with regular gap. (A vertical stripe flash at especial color)

- (1) This is a problem about CTRL B/D.
- (2) Replace the CTRL B/D.

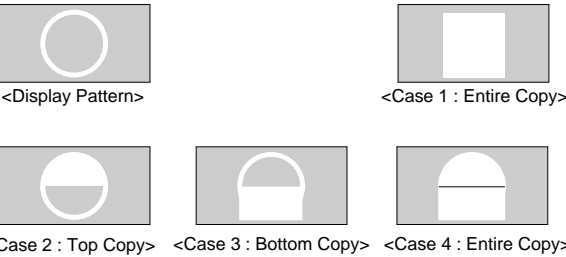
#### \* Screen Display Form



### 2-7. A data copy is happened into vertical direction

- (1) In this case, it's due to incorrect marking of scan wave.
- (2) Replace the Y DRV B/D or Y B/D.

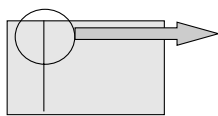
#### \* Screen Display Form



## 2-8. The screen has one or several vertical line

- (1) In this case, It isn't a problem about CTRL B/D or X B/D.
- (2) It may cause followings.
  - It's out of order a panel
  - Open or short of DATA TCP FPC attached panel
  - It's out of order a DATA TCP attached panel
- (3) Replace Module.

### \* Screen Display Form



It may show several vertical lines in a quarter or other division part of screen including left case.

## 2- 9. The screen has one or several horizontal line

- (1) In this case, it isn't a problem about CTRL B/D or Y B/D.
- (2) It may cause followings.
  - It's out of order a panel
  - Open or short of SCAN FPC attached panel
  - It's out of order a SCAN IC attached panel
- (3) Replace Y DRV B/D

### \* Screen Display Form



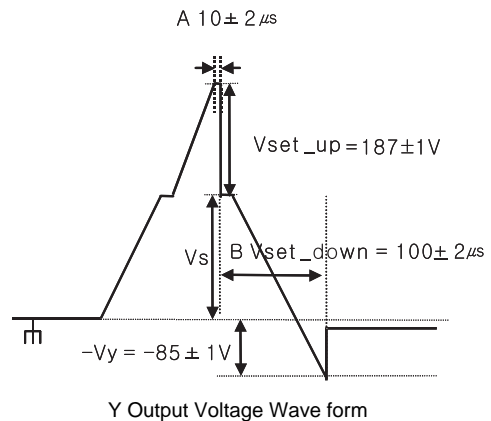
It may show several horizontal lines including left case.

## 2-10. The screen displays input signal pattern but the brightness is dark

- (1) In this case, Z B/D operation isn't complete.
- (2) Check the power cord of Z B/D.
- (3) Check the connector of Z B/D and CTRL B/D.
- (4) Replace the CTRL B/D or Z B/D.

## 2-11. The screen displays other color partially on full white screen or happens discharge partially on full black screen.

- (1) Check the declination of Y B/D set up, set down wave.
- (2) Measure each output wave with oscilloscope(more than 200MHz) and compare the data with below figure data. Adjust the Y B/D Set\_up(A) and Set\_down(B) declination by changing VR1 and VR2 as same writing on the adjustment label.



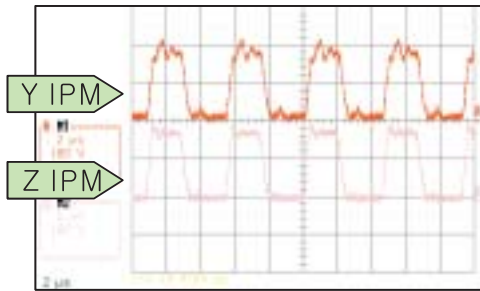
## 2-12. It doesn't display a specified brightness at specified color

- (1) Check the connector of CTRL B/D input signal.
- (2) Replace the CTRL B/D.

### 3. Checking for Component Damage

#### 3-1. Y IPM(IC 15) or Z IPM(IC 2) Damage

- (1) When the internal Sustain\_IGBT or ER\_FET of Y IPM(IC 15) or Z IPM(IC 2) is damaged, VS FUSE is open and screen doesn't be shown.
  - Test Point: B32~GND(Y B/D), B28~GND(Z B/D)
  - Wave format: B32(Y B/D) or B28(Z B/D) has no output wave.

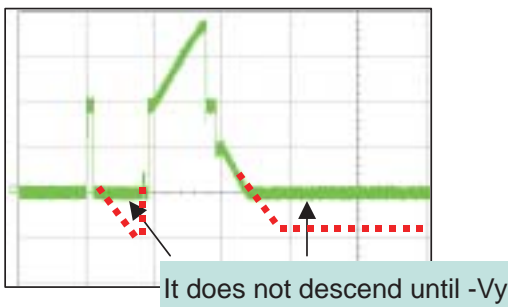


<IPM Normal Output Wave>

- Measurement position: Sustain section enlarge the after measuring B32 wave of Y B/D and B28 wave of Z B/D. (Full White Pattern)

#### 3-2. Pass Top FET(Y B/D: HS2) Damage

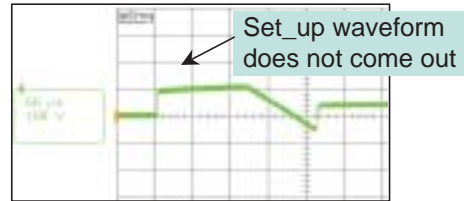
- (1) When Pass Top FET is damaged, electric discharge of entire screen is generated.
  - Test Point: Enlarge the after measuring GND~B32(Y B/D)
  - Wave format: When the Set\_dn does not descend until -Vy.



<When the Pass Top FET is damaged>

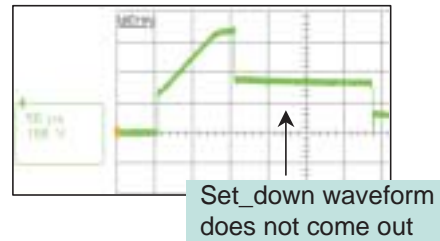
#### 3-3. FET Ass'y(Y B/D: HS1) Damage

- (1) When Set\_Up FET is damaged, screen doesn't be shown
  - Test Point: Enlarge the after measuring GND~B32(Y B/D)
  - Wave format: Set\_up waveform does not come out.



<When the Set\_Up FET is damaged>

- (2) When Set\_Down FET is damaged, electric discharge of entire screen is generated.
  - Test Point: Enlarge the after measuring GND~B32(Y B/D)
  - Wave format: Set\_down waveform does not come out.



<When the Set\_Down FET is damaged>



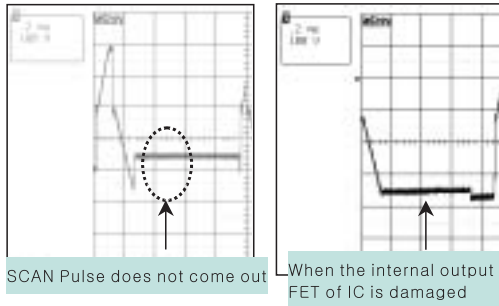
<Reset section normal output wave>

- Measurement position: Reset section enlargement wave of B32(Y B/D) (Full White Pattern)

### 3-4. SCAN IC(Y DRV B/D: IC1~8) Damage

- (1) In case of SCAN IC poor, one horizontal line may open at screen.

- Test Point: ICT measurment of GND~Y DRV B/D output
- Wave format: As shown below figure.



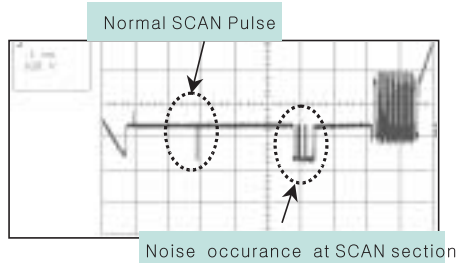
<When SCAN IC is poor>

- (2) Screen may not shown when SCAN IC is damaged by SCAN IC poor, external electricity or spark.

- Test Point: ICT measurment of GND~Y DRV B/D output
- Wave format: Output wave format isn't output (You can see the damage for Y DRV B/D Top or Bottom's SCAN IC)

- (3) Screen shaken horizontally when Y DRV B/D Top and Bottom cable is poor

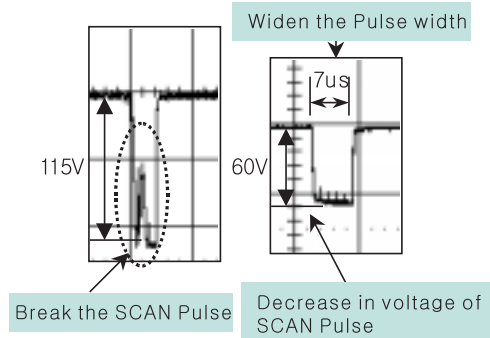
- Test Point: ICT measurment of GND~Y DRV B/D output
- Wave format: As shown below figure.



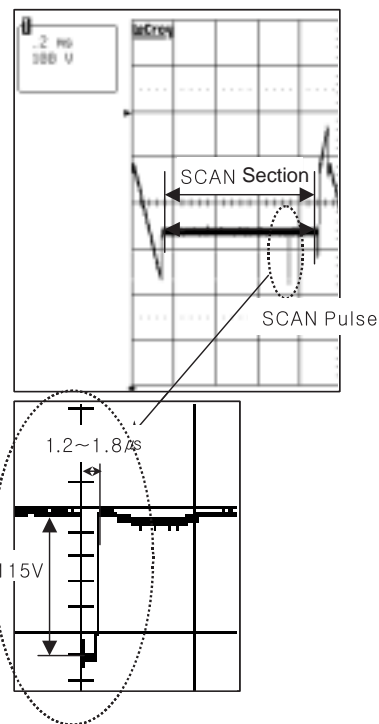
<When Y DRV B/D Top and Bottom cable is poor>

- (4) In case of shorting the SCAN IC output by a dust, foreign substance, it may overlap two horizontal lines on screen.

- Test Point: ICT measurment of GND~Y DRV B/D output
- Wave format: As shown below figure.



<When SCAN IC output is short>



<SCAN IC Normal Output Wave >

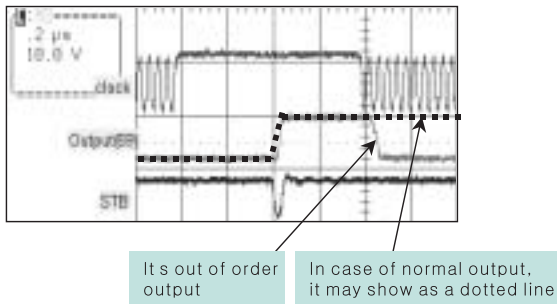
- Measurment position: SCAN section enlarge the after measuring output ICT of Y DRV B/D. (Full White Pattern)



### 3-5. TCP Damage

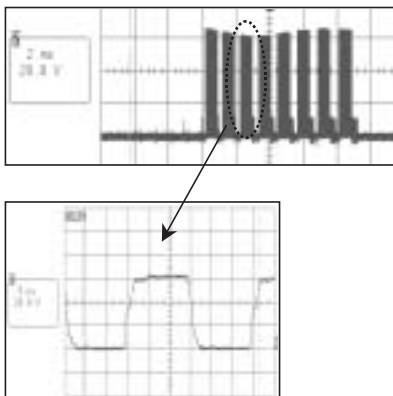
- (1) In case of shorting or opening the IC output of TCP, it may show one or several vertical lines.
  - Test Point: Enlarge the after measuring output TP of GND~TCP
  - Wave format: As shown output below figure.

In case of normal wave output, when STB signal is generated, maintain High output. And when STB signal is generated again must be fall Low.  
But when IC of TCP is poor, STB signal is not generated Output falls with Low.



<When IC output of COF is poor>

- (2) In case of being damage IC of TCP or power resistance, the screen doesn't be shown or happens discharge partially.
  - Test Point: Enlarge the after measuring output TP of GND~TCP
  - Wave format: Output wave doesn't come out

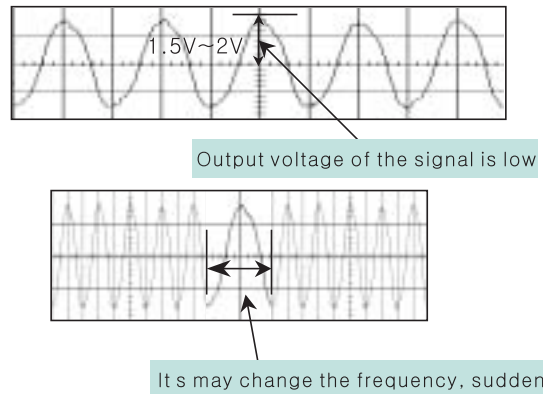


<TCP Normal Output Wave >

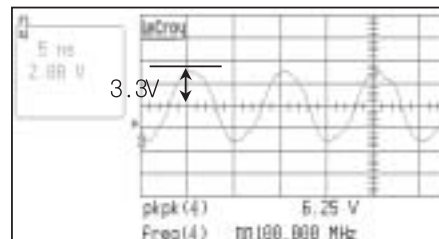
- Measurement position: Enlarge the after measuring output TP of TCP (Full White Pattern)

### 3-6. Crystal(CTRL B/D: X1) Damage

- (1) When Crystal is damage, the screen doesn't be shown.
  - Test Point: Measuring 3pin of GND~Crystal(CTRL B/D: X1)
  - Wave format: Output wave doesn't come out
- (2) In case of unusual launch of the Crystal, it may blink the screen.
  - Wave format: As shown below figure



<When Crystal is poor>



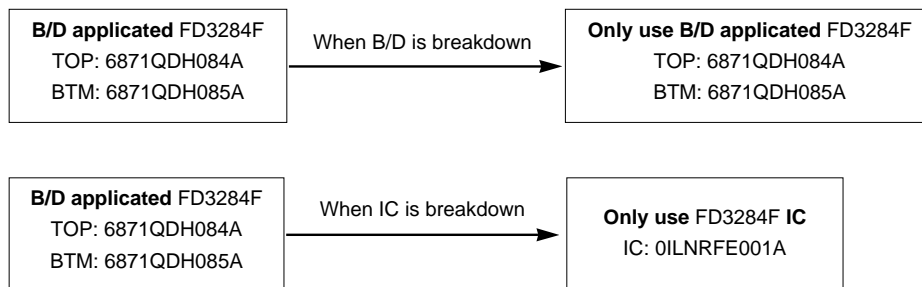
<Crystal Normal Output Wave >

- Measurement position: Measuring output 3pin of Crystal(X1: 100MHz) on CTRL B/D (Full White Pattern)

## 4. Shift breakdown component compatibility consideration

### 4-1. Scan IC follows in application, compatibility of Y DRV Top, Bottom B/D

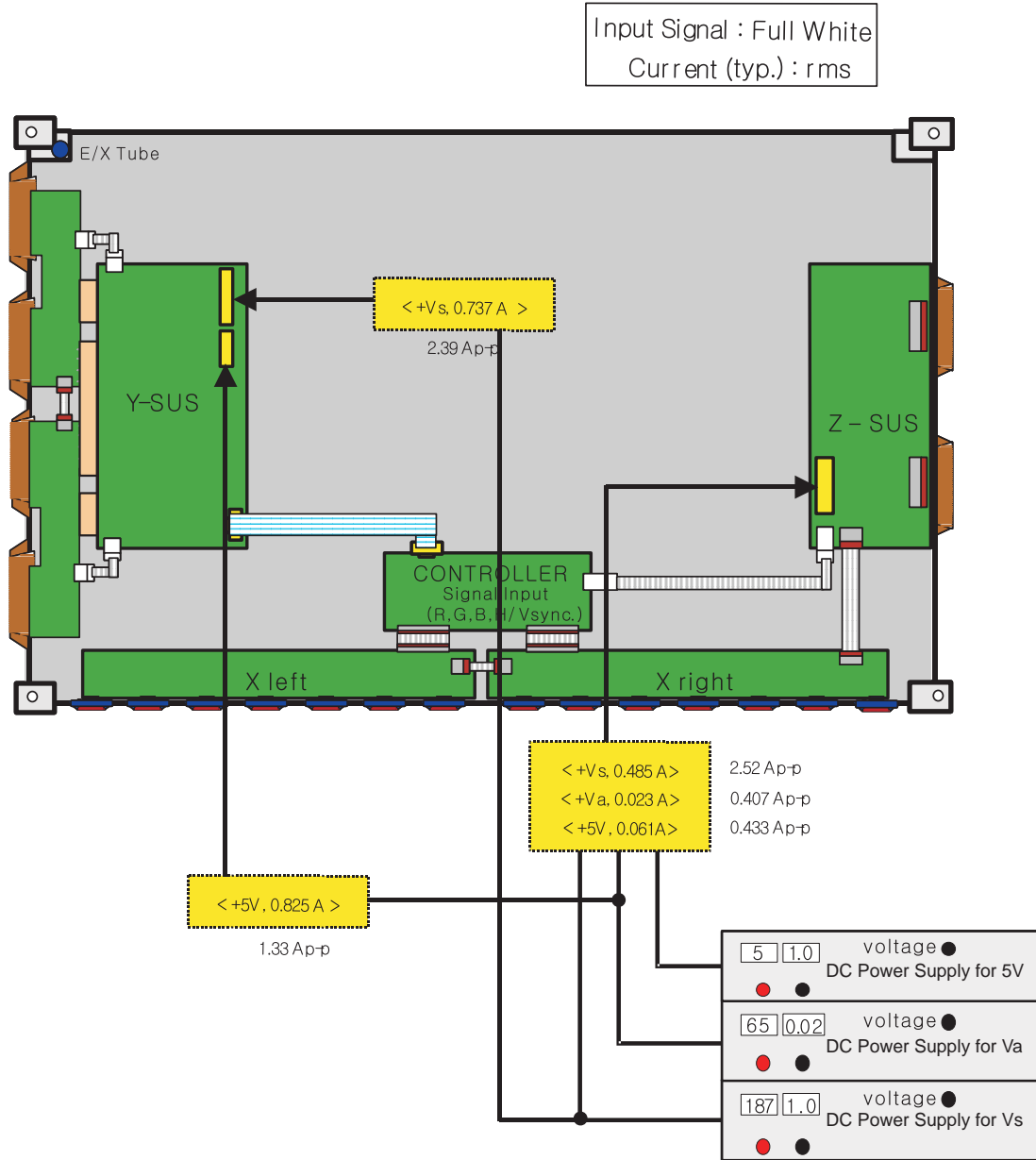
- (1) When B/D applicated FD3284F is breakdown, you must mutually only replace Top B/D and Bottom B/D applicated FD3284F.
- (2) When IC of B/D applicated FD3284F IC is breakdown, you must only replace FD3284F IC.  
Different IC application being not right



- \* When replacing the IC, notice  
To prevent dust, fix the same IC after removing the silicon  
and then it again stick the IC.

Silicon Part No.: 7254Q00002A(Tube Type)  
7254Q00002B(Can Type)


## V . Block Diagram










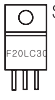
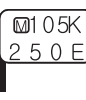
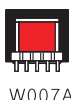
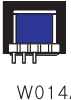













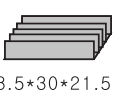




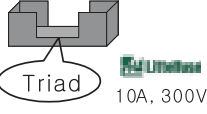











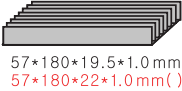






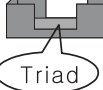
English

















## VI. Safety Components List

(1) The safety components list of PDP42V7#### Model is as below.

(2) A component of  mark is important to keep product's security. Therefore in exchanging a component, appointed component is necessary used.

(3)  is an abbreviated word which is instead of <Safety>-mark.

	C27,28,31,34,58	C26,53,56,59,64,68,69	IC200
	 Samwha	 Samwha	 NATIONAL
D17	C 8~10,21,25,40~42	 T1	 T3
 SHINDENGEN 20A/300V SF20LC30	 Panasonic	 GET Plus 15V 10pin W007A ( )	 GET Plus Vy, Vsc 6pin W014A ( )
 L1,2	 FL1	 IC15	 HS1
 GET Plus( ) 0.6uH 6140QD0013A	 GET Plus( ) 60uH 33.5 turns	 Heat Sink(IPM) 57*180*19.5*1.0mm ( ) 57*180*22*1.0mm ( )	 Heat Sink(FET) 99.5*30*25*1.5mm
 IC9,11	 HS2	 FS1	 FS2
 Photo Coupler AUK SPC717M( )	 Heat Sink 68.5*30*21.5*1.0	 10A, 125V	 T2.0AH 250V( ) T4.0AH 250V( )
 Fuse holder	 T4		
 Triad 10A, 300V	 GET Plus Vy, Vscw 6pin W014A ( ) W013A ( )		
	C9,10,11,12,13	D1	C1,2,3,4,5,6,7,8
	 Samwha	 SHINDENGEN 20A/300V SF20LC30	 Panasonic
 L1,2	 FL1	 IC2	 FS1
 GET Plus( ) 0.6uH 6140QD0013A	 GET Plus( ) 60uH 33.5 turns	 Heat Sink(IPM) 57*180*19.5*1.0mm ( ) 57*180*22*1.0mm ( )	 T2.0AH 250V( ) T4.0AH 250V( )
 FS2	 FS3	 Fuse holder	
 T6.3AH 250V( ) T4.0AH 250V( )	 10A, 125V	 Triad 10A, 300V	

	 42 Glass	 42 Frame	 FPC
 Panel	 Asahi glass Front:978(W)*550(H) Back:958(W)*570(H)	 1005(W)*597(H)	 YoungPoong YOSerise ( ) Daeduck GDS F1-0 ( )
 Film Filter(Optional)			
 LG Chem. ( ) Mitsui Chem( )			
	 Thermal Pad	 TCP	 TCP Heat Sink
 X B/D	 Dow Corning TP 2460 ( )	 UBE Industries (CSII) ( ) Flammability : VTM-0	 898*19*20.7*1.0

## VII. Records of Revision for Boards, components and ROM DATA

### 1. Boards

No.	Date	Board	Part Number	Note
1	2005.03.04	LVDS CTRL B/D ASS'Y	6871QCH053A	Initial Product
2	2005.03.04	HITACHI COPPER LVDS CTRL B/D ASS'Y	6871QCH073A	Initial Product
3	2005.03.04	LVDS OUTER SIDE CTRL B/D ASS'Y	6871QCH053B	Initial Product
4	2005.03.04	PB-FREE FFC & CON LVDS OUTER SIDE CTRL B/D ASS'Y	6871QCH053C	Initial Product
5	2005.03.04	YDRV TOP B/D ASS'Y	6871QDH084A	Initial Product
6	2005.03.04	HITACHI COPPER YDRV TOP B/D ASS'Y	6871QDH105A	Initial Product
7	2005.03.04	YDRV BTM B/D ASS'Y	6871QDH085A	Initial Product
8	2005.03.04	HITACHI COPPER YDRV BTM B/D ASS'Y	6871QDH106A	Initial Product
9	2005.03.04	XR B/D ASS'Y	6871QRH055A	Initial Product
10	2005.03.04	PB-FREE FFC & CON XR B/D ASS'Y	6871QRH055B	Initial Product
11	2005.03.04	HITACHI COPPER XR B/D ASS'Y	6871QRH066A	Initial Product
12	2005.03.04	XL B/D ASS'Y	6871QLH047A	Initial Product
13	2005.03.04	PB-FREE FFC & CON XL B/D ASS'Y	6871QLH047B	Initial Product
14	2005.03.04	HITACHI COPPER XL B/D ASS'Y	6871QLH056A	Initial Product
15	2005.03.04	YSUS B/D ASS'Y	6871QYH036A	Initial Product
16	2005.03.04	PB-FREE FFC & CON YSUS B/D ASS'Y	6871QYH036B	Initial Product
17	2005.03.04	HITACHI COPPER YSUS B/D ASS'Y	6871QYH050A	Initial Product
18	2005.03.04	ZSUS B/D ASS'Y	6871QZH041A	Initial Product
19	2005.03.04	HITACHI COPPER ZSUS B/D ASS'Y	6871QZH052A	Initial Product

2. COMPONENTS

No.	Date	COMPONENT	Part Number	Remark
1	2005.03.04	Y IPM(YSUS B/D: IC15)	4921QP1031A	Initial Product
2	2005.03.04	Z IPM(ZSUS B/D: IC2)	4921QP1031A	Initial Product
3	2005.03.04	SCAN IC(YDRV B/D: IC1~8)	0ILNRF001A	Initial Product
4	2005.03.04	TCP	0ILNRD1002A	Initial Product
5	2005.03.04	FET(Y B/D: HS1)	4921QF2007A	Initial Product (Set_up/Set_dn FET Ass' y)

English

3. ROM DATA

No.	Date	ROM Data Version	Contents
1	2005.03.04	42V73DN03	Inner Type LVDS Initial ROM Data
2	2005.03.04	42V73LV03	External Type LVDS Initial ROM Data





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